

PROSPECTS

Towards decent work for young refugees and host communities in the digital platform economy in Africa

Kenya, Uganda, Egypt





Kingdom of the Netherlands

Copyright © International Labour Organization 2021 First published 2021

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: rights@ilo.org. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with a reproduction rights organization may make copies in accordance with the licences issued to them for this purpose. Visit www.ifrro.org to find the reproduction rights organization in your country.

ISBN: 9789220351536 (print)

9789220351543 (web pdf)

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on ILO publications and digital products can be found at: www.ilo.org/publns

Coordinators: Susana Puerto-Gonzalez and Drew Gardiner Author: Andreas Hackl Co-authors, Recommendations chapter: Andreas Hackl and Drew Gardiner

Cover photo: Refugee student in Kakuma refugee camp, Kenya, studying to complete her secondary education through the Vodafone/UNHCR Instant Schools programme. Through the programme, this student successfully completed her diploma and secured a place at Kinshasa University to study medicine. ©Vodafone Foundation & UNHCR/Sala Lewis

Foreword

The growth of the digital economy in Africa, albeit slow paced when compared to high-income countries, presents policy makers and policy-making institutions such as the ILO with a conundrum. On the one hand, the digital economy offers opportunities that make it possible for people to "leapfrog" across barriers traditionally related to labour market access, such as distance to workplace, access to customers, and the need for office space while offering greater flexibility in balancing work and care commitments. However, at the same time, the web is often associated with lower quality jobs and informality.

In February 2021, the ILO released its flagship report — World Employment and Social Outlook 2021 — that focused on this subject. Titled "The Role of Digital Labour Platforms in Transforming the World of Work", the report provided, for the first time ever, a deep and robust investigation into the nature of work and working conditions of online workers and the platform companies which engage or employ them. The findings revealed the pros and cons of the platform economy – the work opportunities for many young women and men, but also the vulnerability of workers engaged in unregulated digital platform work. The report proposed a roadmap for moving towards decent work for platform workers, including their transition to formality and the need to engage in social dialogue with employers and trade unions to find sustainable solutions that benefit all. The report also called for further study into how different groups of marginalized people, such as migrants and refugees, can benefit from decent work in the digital economy.

This report "Towards Decent Work for Young Refugees and Host Communities in the Digital Platform Economy in Africa" responds to that call by looking at young displaced populations, and the communities which host them in three African countries: Egypt, Kenya and Uganda. The three countries, although each with their unique characteristics, all present policy agendas which call for heavy investment in digital sectors to promote job creation. They are also three of the largest refugee-hosting countries in the world, and it is at this intersection where the report's hypothesis emerges: to what extent can the digital economy, and more specifically digital labour platforms, provide durable and decent work solutions to longstanding refugee challenges and where do the opportunities lie? Are the deep challenges related to access, skills and inclusion insurmountable and if not, what can the development community do to assist?

The ILO's answer is to apply its unique mandate on decent work to bridge the development and humanitarian nexus and ensure that forcibly displaced people and the countries that are affected by displacement issues, have inclusive and accessible skilling opportunities and labour markets. These are among the key objectives of the PROSPECTS Partnership. PROSPECTS is a joint and fully integrated partnership programme which includes the ILO, the United Nations International Children's Emergency Fund (UNICEF), the United Nations High Commissioner for Refugees (UNHCR), the International Finance Corporation (IFC) and the World Bank. The programme responds to forced displacement in eight priority countries in the Middle East and North and the Horn of Africa, in collaboration with and supported by the Government of the Netherlands.

Young people have been one of the groups most affected by displacement, but are also one of the groups most ready to benefit from digital transformations. The average age of workers on web-based digital platforms is 31, while it is 36 for on-demand taxi services and 29 for delivery services. Moreover, young people are more likely to have a high level of digital literacy and more opportunities to access the Internet. Young women are emerging in the digital economy in occupations such as coding and online translation. However deep divides exist, even among young people.

Young people, and in particular young women, are important beneficiaries of the PROSPECTS programme. Youth are targeted across the three main intervention pillars of the programme: education and training, employment and livelihoods and protection, including social protection. For the ILO, the strategic framework for engaging youth is articulated in the 2020 Governing Body paper "A Renewed Call for Action on Youth Employment". The strategy highlights five thematic areas of action: 1) employment and economic policies for youth employment; 2) employability – education, training and skills, and the school to-work transition; 3) labour market policies; 4) youth entrepreneurship and self-employment; and 5) rights for young people. In addition, the ILO coordinates the UN-led Global Initiative on Decent Jobs for Youth where youth in fragile situations and youth in the digital economy are two of the eight thematic priorities.

The following report sets a conceptual and operational background for the ILO and the other PROSPECTS partners for expanding investment in the digital economy and labour platforms for refugee and host community youth in a manner that is consistent with the ILO's normative agenda and international labour standards. The report highlights the important role that the digital economy can play in integrating these marginalised communities and ensuring their access to decent work, while warning of the risks of failing to do so and thereby exacerbating inequalities. For young women and men who are already vulnerable and therefore susceptible to decent work deficits, it is critical that integrated policy solutions that ensure their access to quality jobs and social protection in the digital economy are identified.

Jukte Daspiple

Sukti Dasgupta

Chief of the Employment, Labour Markets and Youth Branch, Employment Policy Department, ILO

Tine Staermose

Special Adviser, Labour Market Institutions and Governance, DDG/P, ILO

Acknowledgements

This report was authored by Andreas Hackl at the University of Edinburgh and coordinated by Drew Gardiner and Susana Puerto-Gonzalez at the ILO. Andreas Hackl and Drew Gardiner co-authored the Recommendations chapter. Andreas Hackl conducted and coordinated the primary research in collaboration with the following Researchers at Samuel Hall: Mathew Mungai (interviews for Kenya and Uganda), Hadil Dayri (interviews for Egypt), Jared Owuor (overall planning at Samuel Hall and interview transcript review for Kenya, Uganda and Egypt), Lisa Pfister (interview transcript review for Uganda).

The insights presented in this report build on the participation and cooperation of all research participants, to whom the authors and coordinators of this report are indebted for sharing their experiences and knowledge. Moreover, the present report benefitted greatly from the generous and critical input of a number of individuals at the ILO: Uma Rani, Rishabh Kumar Dhir, Christine Hofmann, Nicholas Grisewood, Adriana Sierra Leal, Simon Hills, Aurore Iradukunda, Lou Tessier, Shady Shehata, Amir Faheem, Stephen Opio, Caroline Njuki, Quynh Nguyen and Christina Behrendt.. Moreover, the author and coordinators would like to thank Loretta Kathleen Foran at the International Finance Corporation (IFC).

Contents

Foreword	i
Acknowledgements	iii
Chapter 1: Executive summary	1
Chapter 2: Introduction	14
Chapter 3: Methodology	18
Chapter 4: The digital economy: refugees, youth and the digital divide	19
Chapter 5: Digital economies in Africa	23
Chapter 6: Background on the three case studies: refugees and host community youth in the (digital) labour market	e 30
Chapter 7: The digital economy among refugees and youth: discussion of individual platform	ıs 38
Chapter 8: Digital skills initiatives and training	62
Chapter 9: Entering the digital economy: the experience of youth and refugees	78
Chapter 10: Conclusion: the way forward	89
Chapter 11: Recommendations	94
Bibliography	100
Appendix: List of selected digital platforms in Kenya, Uganda and Egypt	103

Executive summary

The world of work is subject to digital transformation and has witnessed a rapid rise of the digital platform economy over the last decade. Despite a growing body of research on this topic, the specific implications of this transformation for refugees and other marginalized populations remains poorly understood. The ILO's Youth Employment Accelerator and the PROSPECTS partnership commissioned the present research to set a basis for a series of upcoming interventions in the digital economy, and more specifically in relation to digital labour and e-commerce platforms within PROSPECTS target countries in Africa. With a focus on Kenya, Uganda and Egypt, this report aims to contribute to a better understanding of the main challenges and opportunities that digital labour and e-commerce platforms in Africa pose for supporting a wider transition to decent work, with a concentration on refugees, displaced persons and their host communities. It builds on important recent ILO publications on this topic, including the 2021 *World Employment and Social Outlook* (WESO) on the digital platform economy and the report *Digital Refugee Livelihoods and Decent Work: Towards Inclusion in a Fairer Digital Economy.*¹

Informed by 46 interviews, extensive desk research, and a mapping of platforms and other key actors (see appendix on page 103), this research explores job creation in the digital economy from the unique experiences and perspectives of youth and refugees, as well as from the viewpoint of digital labour and e-commerce platforms, digital training providers, start-up incubators, policymakers and other initiatives run by international organizations and NGOs. It will become clear in the following pages that African governments and the international aid community invest much hope in the digital economy's potential for job creation and economic inclusion of youth and refugees. Digital platforms offer attractive livelihood options, as they erase the traditional office-based environment, provide flexibility in work schedule and allow for a job to be performed at any time, from anywhere in the world. They also have the potential for workers to better combine professional and family life, more income to individuals in vulnerable situations, more opportunities for women; and encourage entrepreneurship and innovation and offer more accessible openings for quality skilling and upskilling. In addition, they can improve service quality and significantly increase the possibilities to transition to formality, among other advantages.

¹ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work (Geneva, 2021); Andreas Hackl and ILO, Digital Refugee Livelihoods and Decent Work: Towards Inclusion in a Fairer Digital Economy (Geneva, 2021). https://www.ilo.org/global/topics/labour-migration/publications/WCMS_785236/lang--en/index.htm.

The online marketplace is often perceived to be easily accessible at a time when local employment alternatives outside urban centres are frequently scarce. The case of refugees offers a critical view on sometimes overly optimistic ideas about the digital platform economy as inclusive, empowering and transformative. Indeed, the current state of refugees and youth in the digital platform economy raises some serious concern about the lack of inclusion and the absence of adequate social protection, rights at work and decent working conditions. This situation becomes further challenged when considering the complex issue of the employee-employer relationship. Almost without exception, work through digital labour platforms is classified as self-employment, while small-scale e-commerce, such as selling and trading consumer goods online, is largely informal.

The way forward is complex and will require both new directions in thinking and action; while ensuring application of principles of social dialogue and decent work. At the heart of this complication lies a dilemma: the largely unregulated digital platform economy is progressively becoming a go-to option for work among certain sections of youth and refugees in Africa and elsewhere, despite the challenges relating to working conditions. Unless the fundamental elements of the business model of the platform economy change, opportunities on these platforms will remain low quality and precarious. Ensuring decent working conditions in the digital economy needs coordinated actions at different levels to ensure that international labour standards, when ratified, are properly implemented and to ensure that policies and further regulations are discussed and adopted through social dialogue.

Structure of the report

The conclusion and recommendations in this report offer important insight and a basis for critical thinking and innovation to inform policymakers and intervention design in the future. Besides the conclusion and introduction, the main body of the report is structured into five main sections. The first of these offers a background discussion of the digital economy, its main characteristics, and its particular relevance for youth and refugees in Africa. The second section provides background and analysis on the current relevance of the digital economy as a means for job creation in the three countries that are the focus of this report: Kenya, Uganda and Egypt. The third section takes a closer look at the different types of platforms and their relevance across the three countries, as well as regionally and globally, while focusing the discussion on their suitability and accessibility for refugees and disadvantaged youths. The fourth section dives deeper into the sphere of digital skills training and entrepreneurial hubs, providing an overview of major actors in the three countries while discussing the opportunities and challenges they pose. The final section adopts the perspective of refugees and youth themselves, offering insight into their own experience in the digital economy and reflecting on the main challenges they face.

Summary of main findings

The digital platform economy

Digital labour platforms are transforming the world of work and they have become a distinctive part of the digital economy. Digital labour platforms have the potential to provide workers, including women, people with disabilities, young people, refugees and migrant workers, with income-generating opportunities that are not bound to the local market. Platforms "break down" certain barriers associated with traditional jobs: work can be done online from any location, traditional qualifications may not be needed, and there is flexibility regarding when and how much individuals may want to work.

The platform economy has given rise to an entrenchment of unequal global economic geographies, whereby work is outsourced through platforms by businesses in the global North and performed by workers in the global South.² These workers from developing countries face major challenges in their access to the digital economy, owing to shortcomings in digital infrastructure alongside inadequate financial infrastructure, human resources and institutional capacities.³ This report focuses on both digital labour platforms and e-commerce platforms. Digital labour platforms include online web-based platforms, where tasks are performed online and remotely by workers, and location-based platforms, where workers operate locally through a mediating digital platform.⁴ E-commerce includes the selling and buying of goods through online marketplaces and major platforms, as well as through social media channels, especially among small-scale entrepreneurs.

Digital labour platforms have provided income-generating opportunities and entrepreneurship among youth. Indeed, based on surveys undertaken by the ILO, the average age of workers on online web-based platforms is 31, while it is 36 for location-based on-demand taxi services and 29 for delivery services.⁵ Moreover, youth are more likely to have high digital literacy and are therefore seen as particularly suited to becoming new entrants for the digital economy. **Despite these opportunities**, **many inequalities persist** that limit the extent to which digital platforms can contribute to decent job creation in Africa, as workers often face high levels of competition and cannot access platforms because they do not meet their registration requirements. In addition, owing in part to the lack of employment relationship, workers do not have regularity of work, have low earnings, low social protection and face challenges related to unionization and collective bargaining.

The digital economy among migrants and refugees

The digitalization of work plays a particular role for refugees and migrants. As they often struggle to enter local labour markets, a large share of migrant workers provide labour power behind digital platforms.⁶ **The particular experience of refugees reveals additional barriers**, the predominant one being difficulties in obtaining work permits, but also financial exclusion from banking, making online transactions difficult where mobile money is not readily available. The ostensibly "indiscriminate" onboarding onto digital platforms does not apply to refugees in the same way, as they often lack ID documentation to meet platforms' Know-Your-Customer (KYC) requirements or face restricted access because of their nationality and location. Moreover, the dominant **classification of workers on platforms as self-employed or independent contractors has ambivalent implications for migrants and refugees**: on the one hand, it provides a potential legal grey zone within what could be considered

² ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 44.

³ Ibid., 34.

⁴ Ibid., 43.

⁵ Ibid.

⁶ Niels van Doorn, Fabian Ferrari, and Mark Graham, *Migration and Migrant Labour in the Gig Economy: An Intervention*, 2020, 2. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3622589.

otherwise restrictive labour laws; on the other, this informality can induce low quality work on platforms that may recruit refugees and migrants at low cost, given their need for a livelihood and economic survival.⁷ **Understanding the digital economy from the perspective of refugees allows us to see how the inclusivity of platforms intersects with decent work deficits, revealing a largely understudied aspect of the digital divide**.

The promise of the digital platform economy to provide work to anyone with the right skills and internet connection, practically from anywhere, appears especially significant in a context of the labour market restrictions, discrimination and mobility restrictions faced by many refugees. Moreover, the digital economy continues and often intensifies a long-standing prevalence of informal work among youth and refugees. Informal work is widespread in many African economies and has been particularly consistent among refugees, who face widespread restrictions to their right to work, restricted geographical and social mobility, and therefore frequently work in informal sectors.⁸ Overall, in the world, more than six workers out of ten, and four enterprises out of five operate in the informal economy.⁹

The digital economy in Africa

The digital economy in Africa features a very **unequal spread of ICT infrastructure and connectivity**. Internet usage rates range from more than 60 per cent in the more developed economies to less than 10 per cent in the region's least developed economies. Mobile cellular coverage in Africa lies around 88.4 per cent, with some 77 per cent of the population living within reach of a 3G signal. The percentage of Africans using the internet increased from 24.8 per cent in 2017 to 28.6 per cent by 2019, but only 14.3 per cent of households had internet access at home by 2019.¹⁰ Moreover, there is a persistent gender gap and a rural/urban divide despite a steady growth in connectivity, with the ITU writing that only 20.2 per cent of women used the internet in 2019, compared with 37.1 per cent of men. While only 6.3 per cent of rural households had access to the internet in 2019, the share was 28 per cent in urban households.¹¹

African governments invest high hopes in the transformative potential of the digital economy. The digital strategies and policy blueprints of the African Union and individual governments reflect a strong belief that digital transformation in the world of work and entrepreneurship will help African societies and economies to grow and leapfrog towards prosperity. However, **digital sectors create only a few jobs, and these are not sufficient to meet Africa's employment needs**, while the current digital ecosystem cannot provide enough jobs for all young Africans in the near future.¹² Digital economies in Africa nonetheless continue to embody a powerful promise of inclusion and development in response to a rising population of unemployed youth and a large informal sector.

As some 85 per cent of employment in Africa is informal already, this may mean that many informal workers do not perceive the spread of digital labour and e-commerce as a threat ("removing rights they do not have") but may see it as an opportunity, according to the Mastercard Foundation.¹³ This indicates a susceptibility to decent work deficits that makes it all the more important and urgent to transform digital labour into formal, well protected and decent work. Some 40,000 Kenyans were already registered

- 9 https://www.ilo.org/global/topics/employment-promotion/informal-economy/lang--en/index.htm
- 10 ITU, Digital Trends in Africa 2021: Information and Communication Technology Trends and Developments in the Africa Region 2017–2020, 2021, 3–4.

13 MCF, *Digital Commerce and Youth Employment in Africa*, 2019, 5–6. https://mastercardfdn.org/wp-content/uploads/2019/03/ BFA_Digital-Commerce-White-Paper_FINAL_Feb-2019-aoda.pdf.

⁷ Lorenzo Tondo, "Uber Eats in Italy Investigated over Alleged Migrant Worker Exploitation", in *The Guardian*, 13 October, 2020. https://www.theguardian.com/world/2020/oct/13/uber-eats-in-italy-under-investigation-for-alleged-exploitation-of-migrant-workers.

⁸ Alexander Betts et al. (eds), "Refugee Economies", *Refugee Economies: Forced Displacement and Development* (Oxford: Oxford University Press, 2016).

¹¹ Ibid., 4.

¹² OECD and AU, Africa's Development Dynamics: Digital Transformation for Quality Jobs, 2021, 46.

on Upwork in 2014,¹⁴ with the current numbers likely being far higher, while interview sources in Egypt estimated the number of Egyptian workers on Upwork at around half a million. While **this rise in online freelancing has created some opportunities**, digital gig workers also face intense competition within their countries and globally, as it contributes to high employment insecurity and irregular income streams because of the various costs associated with it.¹⁵

In addition to digital labour, e-commerce has grown exponentially too, with Jumia alone comprising 3,500 direct employees and 50,000 businesses selling on its platform.¹⁶ Outside these larger e-commerce platforms, many micro-entrepreneurs use various social media platforms, such as WhatsApp, Facebook or Instagram, to sell their products and promote their services. As e-commerce booms and becomes a centrepiece of the global economy amid growing numbers of people buying and selling online, the digital marketplace in Africa had just over 2.2 billion visits in 2019, or less than 10 per cent of the traffic on Amazon.com. Just ten African countries are responsible for almost all the traffic, and the largest and most active tend to be present only in the biggest, most advanced economies within the region, including Kenya and Egypt. **Part of the barriers that have limited the growth and inclusivity of online marketplaces** is a digital divide, with large sections of the population remaining without internet access, low purchasing power among consumers, and poorly developed delivery systems. Another major barrier has been access to financial institutions, bank accounts and payment mechanisms, despite a growth of mobile money (73 per cent of Kenyans and 51 per cent of Ugandans have a mobile money account).¹⁷

While Africa's transition to the digital economy offers an opportunity for job-rich growth, as the ITU points out, "this requires a skilled workforce, efficient labour market facilitation and an enabling business environment" at a time when "most young people lack the skills that are in demand in the digital economy and do not have access to suitable training opportunities or job matching services, while private sector job creation is insufficient and decent entrepreneurial opportunities are hard to come by".¹⁸ **Closing the gap between Africa's youth and the demand of the digital economy will require interventions on the supply and demand side**: building digital skills among the youth labour force while making more digital jobs available that match the skill levels of the supply.

The digital economy in Kenya, Uganda and Egypt

Kenya, Uganda and Egypt all invest heavily in the digital economy and adopt wider national strategies. Yet only 22.5 per cent of the Kenyan population used the internet by 2020, compared with 57 per cent in Egypt and 24 per cent in Uganda.¹⁹ In Kenya and Uganda the proliferation of mobile money has been a strong catalyst for digital economic activity. The value of **Kenya's ICT sector** grew from 2017 to 2018 by 13 per cent to 390.2 billion Kenyan shillings, driven by growth in the digital economy.²⁰ The Kenyan government invests much hope in the ability of the digital economy to help the country leapfrog towards an emerging market. In a similar vein, the Government of **Uganda** has committed the country to the Digital Uganda Vision (DUV), which is a strategic national policy framework. The Third National Development Plan (NDP III) identifies ICT as one of the major components of transforming Uganda from a lower-income to a middle-income country. The ambitious vision is somewhat limited by a number of constraining factors, such as a very low internet and penetration rate with a wide gap between rural and urban areas: only 9 per cent of Ugandans in rural areas have access to the internet, and about a third (30 per cent) of urban

¹⁴ E. Melampy, Online Outsourcing: How Can Developing Countries Benefit?, 2015.

¹⁵ Pitso Tsibolane, Jean-Paul W. Van Belle, and Selina Linda Mudavanhu, "Digital Gig Work in Africa: An Exploratory Survey", in *Improving African Livelihoods with Digital Information and Technology*, 2018, 4. https://www.researchgate.net/ publication/327596883_Digital_Gig_Work_in_Africa_An_Exploratory_Survey.

¹⁶ MCF, Digital Commerce and Youth Employment in Africa, 11.

¹⁷ ITC, Business and Policy Insights: Mapping e-Marketplaces in Africa (Geneva, 2020).

¹⁸ ITU, Boosting Decent Jobs and Enhancing Skills for Youth in Africa's Digital Economy, itu.int, 2020. https://www.itu.int/en/ITU-D/ Regional-Presence/Africa/Pages/projects/2020/jobs-skills.aspx.

¹⁹ https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=UG.

²⁰ Republic of Kenya, Digital Economy Blueprint: Powering Kenya's Transformation, 2019, 17.

area dwellers.²¹ In consequence, "the preconditions for the digital take-off envisaged by the Digital Uganda Vision have not been met, with poor infrastructural development being the primary driver of low internet use and mobile phone penetration in Uganda".²²

Egypt already began developing a strategy for using ICT towards job creation and development in the 1990s, identifying ICT as a government priority and creating the Ministry of Communication and Information Technology (MCIT). Egypt has suffered from low education attainment, high population growth, and high barriers to market entry and associated challenges in adopting ICT.²³ MCIT has promoted initiatives such as "ICT for all" and others that promote the use of e-commerce in Egypt, to create jobs among youth and encourage SMEs to work in e-commerce and adopt digital technologies.²⁴ In 2016/2017, the Egyptian ICT sector has contributed 3.2 per cent of GDP, and the sector is believed to have provided between 90,000 and 95,000 jobs in the outsourcing industry alone.²⁵ The contribution of Egypt's digital economy to the GDP has increased to 4 per cent in 2019 compared with 3.5 per cent in 2018.²⁶ There are many government-led initiatives in digital Egypt by "developing the ICT infrastructure, fostering digital inclusion, achieving the transition to a knowledge-based economy, building capacities and encouraging innovation, fighting corruption, ensuring cybersecurity, and promoting Egypt's position at the regional and international levels".²⁷

The digital economy and refugees in Kenya, Uganda and Egypt

While refugees in Kenya and Uganda are concentrated in camps and settlements, refugees in Egypt live mostly in urban areas among Egyptians. The Government of **Kenya** has long restricted refugees' socioeconomic freedoms, limiting their movement outside camps. In Kakuma camp, 62 per cent of Congolese, 38 per cent of Somalis and 19 per cent of South Sudanese were engaged in economic activity by 2020. Most urban refugees and asylum seekers work in the informal sector as casual labourers, petty traders, small business owners, and semi-skilled workers.²⁸ While refugees in Kenya face a number of labour market integration challenges, the Kenya Citizenship and Immigration Act 2011 and Refugee Act 2006 support their right to work in terms of contributing to the socio-economic growth of the country. But high unemployment, low economic growth and poverty levels in Kenya make work opportunities scarce.²⁹ Infrastructure and connectivity remain a major challenge too. Smartphone ownership among refugees is not very widespread, data costs can be high, and network signals are low. Unreliable electricity supply, hardware access, and unsuitable workspaces pose significant barriers to refugees' digital access in Kenya.³⁰

With over a million refugees, **Uganda** is the third-largest refugee-hosting nation in the world and the largest in Africa. The country has generous policies towards displaced persons. Yet just 29 per cent of refugees in Uganda are actively working, compared with 64 per cent among host communities. Refugees are 35 percentage points less likely than Ugandan nationals to be employed.³¹ Employment is often substandard and inadequate based on their skills levels. The Ugandan government has recently eased access to mobile-

²¹ Alison Gillwald et al., "The State of ICT in Uganda", Policy Paper Series No. 5 After Access (Cape Town, 2019). https://researchictafrica.net/2019_after-access-the-state-of-ict-in-uganda/.

²² Ibid., 9.

²³ Nagla Rizk and Kamel Sherif, "ICT and Building a Knowledge-Based Society in Egypt", in *International Journal of Knowledge Management*, 9, 1 (2013): 8.

²⁴ Nagwa El Shenawi, "Digital Economy ... How Are Developing Countries Performing? The Case of Egypt", in *Diode*, 2017, 5. https://diodeweb.files.wordpress.com/2017/11/egypt-digital-economy-actions.pdf.

²⁵ Ibid., 6.

²⁶ https://www.trade.gov/country-commercial-guides/egypt-information-and-communications-technology-and-digital-economy.

²⁷ https://mcit.gov.eg/en/ICT_Strategy.

²⁸ https://www.unhcr.org/ke/livelihoods.

²⁹ ILO, Youth Employment Opportunities in Kenya's Digital Economy, n.d., 10.

³⁰ Ibid., 19-21.

³¹ UNHCR, Uganda Policy Brief: Using Socio-economic Data to Promote Employment Solutions for Refugees in Uganda, 2021, 1. https:// www.unhcr.org/5fe31b2b4.pdf.

enabled services for refugees.³² In Bidi Bidi, the largest refugee settlement in Uganda, some 33 per cent of businesses already use mobile money services. The Ugandan government sees refugees as a part of its aim to transform the country's digital infrastructures and digital economy. Julius Torachi of the Ministry of ICT said that there is an aim to "make sure that all the refugees and refugee-hosting communities have unlimited access to the internet and digital infrastructure, which will make them do all kinds of work and businesses online".

The UNHCR in Egypt has registered 254,726 refugees and asylum seekers from 58 nationalities by 2019, and Syrian refugees remain the largest population among them. Refugees and asylum seekers registered with UNHCR can regularize their residency and usually get six-month renewable residence permits, although the process of renewing them has been lengthy and difficult. Syrian refugees mostly reside in urban areas such as Greater Cairo, Alexandria and Damietta, and an estimated 67 per cent are extremely poor and in need of assistance. Administrative barriers that limit access to work permits have caused refugee households to resort to informal employment that can sometimes be unsafe and exploitative.³³ Amid the challenges among refugees to find employment and the rapid growth of the digital economies in Egypt, online freelancing and other digital work appear particularly promising as new forms of accessible work with low barriers to entry.

Digital labour platforms: assessment of suitability for youth and refugees

On-demand location-based platforms offer services through apps and websites that are carried out in person. Location-based platforms in delivery or ride-hailing (see Bolt Food Africa and Careem) appear to be the least promising, despite their general inclusiveness for low-skilled youth, mainly because they tend to operate only in large urban areas, often require national IDs, security checks, a vehicle, and the necessary licences. Location-based platforms in other sectors, such as informal homework services (see Lynk, Tukole), emerged as less stringent when it comes to onboarding barriers, although they, too, appear to be concentrated in urban areas. Moreover, several challenges persist on location-based platforms regarding working conditions, with particular risks for the growing numbers of migrant workers.

Web-based digital labour platforms are, in theory at least, a more suitable solution for economic inclusion and income generation for refugees and disadvantaged youth: they are not location-specific and can be accessed from almost anywhere, do not require vehicles or licences, and feature a near-infinite range of skill sets and professions. They do, however, come with several significant limitations, in addition to those related to the employment relationship, working conditions and labour rights mentioned earlier. Especially in refugee camps, digital infrastructures, hardware access, and a suitable workspace are often absent, and the same is true for marginalized rural areas more generally. Moreover, ID verification requirements and the need for electronic payment mechanisms often exclude refugees from setting up profiles on online web-based platforms, although some have made selective exceptions in accepting alien ID cards or refugee documents (see Upwork). Moreover, many web-based platforms charge a variety of fees that pose obstacles to accessing work for workers from challenging socio-economic backgrounds, such as refugees.

Social impact labour platforms, and related intermediary organizations are well suited for creating income-generating opportunities among refugees and marginalized youth. Ranging from Digital Lions to LevelApp, NaTakallam, Kazi Remote, and Humans in the Loop, these platform organizations often have a dedicated aim of including marginalized populations, including refugees, and they tend to do the bidding for jobs on their behalf: they negotiate with clients with an aim to meet certain minimum earnings, set up long-term partnerships to source projects, and distribute the work evenly, while also being flexible when it comes to payment mechanisms and ID requirements. However, despite their ambitions, social impact platforms generate work opportunities that largely mirror the indecent working conditions in the platform

³² GSMA, The Digital Lives of Refugees: Lessons from Uganda. https://www.gsma.com/mobilefordevelopment/country/uganda/ the-digital-lives-of-refugees-lessons-from-uganda/.

^{33 3}RP, Regional Refugee and Resilience Plan in Response to the Syria Crisis 2020/2021: Egypt, 2020. https://reliefweb.int/report/ egypt/egypt-3rp-regional-refugee-resilience-plan-response-syria-crisis-20202021.

economy at large. Contrary to the ILO's Private Employment Agencies Convention, which stipulates that "private employment agencies shall not charge directly or indirectly, in whole or in part, any fees or costs to workers",³⁴ many of these intermediaries take substantial commissions of up to 50 per cent from the income that workers generate. They justify this as necessary to ensure the sustainability of their business and the ongoing support they provide for workers. Yet this effectively means that refugees and other workers fund part of the business – which acts as an agency in the sense that it matches workers with clients – through their own labour power. The workers therefore also bear the indirect cost for the low prices set by clients in the digital platform economy and outsourcing sectors. Similar to most larger corporate labour platforms, social impact platforms tend to classify workers as self-employed and thereby mirror part of the business model that determines digital platform work as inherently indecent. Some of these platforms are also precariously dependent on a small number of corporate partners from which they source work – a precarity that has been exposed by the impact of the COVID-19 in some cases, such as LevelApp's sudden loss of major clients at the start of the pandemic.

E-commerce platforms: assessment of suitability for youth and refugees

A large variety of e-commerce platforms and online marketplaces are already in operation to increase the reach, profits, and effectiveness of small enterprises. Other informal business is conducted through social media and apps such as WhatsApp and Facebook, where refugees have used online communication with local communities to market and sell goods. Large marketplaces such as Jumia increasingly incorporate training and support into their offerings for vendors, while making it easy to deliver goods and receive payments. Some of the most impactful e-commerce platforms, when it comes to the inclusion of informal businesses, including those run by refugees, cater to the needs of grocers and farmers. Online marketplaces such as MaxAB in Egypt expand rapidly into the informal grocery market and help entrepreneurs to manage their businesses effectively while allowing them to keep track of stocks and transactions. Platforms such as Sky.Garden and Mookh make it increasingly possible for even the smallest of vendors to market and sell their goods online, although the commission fees charged can make it difficult for small vendors to make a profit. Moreover, only very few e-commerce platforms showed an awareness of the specific challenges refugees face in conducting business online, which include their rural and marginalized locations, such as camps, as well as connectivity problems, mobility restrictions, and the frequent limitations on the right to operate a business. Even outside the refugee context, e-commerce platforms have limited reach in rural areas where potential entrepreneurs may not have access to the necessary hardware and infrastructure. One exception is agricultural platforms and ICT-related initiatives in Uganda, which support smallholder farmers while using a very low-tech ICT infrastructure to maximize inclusivity.

Digital skills training: from learning to earning?

Digital skills training is a foundational pillar in the inclusion of disadvantaged and underserved communities into the digital economy. Such training covers a wide range of digital skills, including basic digital literacy and more advanced fields such as web design, programming and data science, as well as specific skills for online freelancing and digital entrepreneurship. **Digital skills training primarily facilitates mobility in the school-to-work transition**, often filling a gap left behind by inadequate school and university curricula that are not linked up with the current market demand. As a precondition for successful access to jobs and career development, digital skills are key to combating digital exclusion. Yet, skills training alone risks building bridges to nowhere unless there are jobs waiting at the other end.

Amid a large variety of training programmes in basic, intermediate, and advanced digital skills that range from basic digital literacy to programming and data science, **one of the main difficulties lies on the demand side**. Indeed, there is an impression that the digitalization of youth in Egypt, Kenya

³⁴ C181 – Private Employment Agencies Convention, 1997 (No. 181), Article 7. https://www.ilo.org/dyn/normlex/en/f?p=NORML EXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312326.

and Uganda progresses more rapidly than the availability of decent ICT-related jobs, contributing to a growing mismatch of supply and demand. This may be one reason why **training in online freelancing is increasingly seen as a quick fix** to this problem, with an implicit assumption that digital labour platforms harbour boundless opportunities, even if the local market cannot absorb graduates. Egypt stands out in this area of investment, with estimates of around half a million Egyptians being registered on one digital labour platform alone (Upwork). This underlines how **a general push towards online freelancing and microtask work, even among university graduates, is likely to contribute to a widening skills mismatch in the future, as highly skilled workers already perform low-skilled tasks and work on platforms that do not match their educational levels.**

Although digital skills training drives forward economic inclusion, it is also exclusive in its own way. For example, a significant share of digital skills offerings focuses on citizens and does not include migrants and refugees in the same way. Especially where major training institutions and initiatives are linked to ministries and government schemes, as in the case of the Information Technology Institute (ITI) in Egypt, national IDs are often a precondition for access. On the other hand, some training initiatives have an explicit aim of supporting refugees, such as the Solidarity Initiative for Refugees (SIR) in Kenya. Overall, there is now a good range of aid-funded and government-supported digital skills training offerings online and on-site across Kenya, Uganda and Egypt, many of which are either free of charge or incur a small fee. While the shift towards online teaching during the pandemic has made it easier for some participants in distant areas to join courses remotely, many face challenges of connectivity and digital literacy to do so. This underlines that Africa still has a long way to go in building a reliable ICT infrastructure that spans urban and rural areas, including refugee settlements and camps.

Entrepreneurial incubators and tech hubs

Parallel to the growing presence of digital skills training for the labour market, a range of "hubs" has emerged to facilitate transitions from early-stage business ideas to sustainable entrepreneurship. Many of these hubs have an explicitly inclusive approach that aims to reach out to youth and refugees living in marginalized areas, which is the case for Innovation Village and Hive Colab in Uganda, or Flat6Labs in Egypt. **Many of these entrepreneurial hubs not only provide the space and community needed to grow a business, but also teach specific skills, such as financial management skills, digital marketing skills, IT skills and practical skills in traditional fields of small-scale entrepreneurship, as in metal fabrication**. Despite these successes and efforts, the hubs spoke of significant challenges faced by themselves and their beneficiaries. These challenges include a difficulty to reach out to and attract young entrepreneurs from rural and marginal areas outside of urban centres. Other challenges were English language skills, a lack of ICT infrastructures, as well as an immature start-up ecosystem with no investment or funding for early-stage small businesses.

Main lessons from the experience of youth and refugees

Interviews with youth and refugees who participated in the digital economy or took part in skills programmes and entrepreneurial training indicate that the reality does not always match the enthusiastic hopes attached to digital "careers". This is particularly so when individuals felt they were left to their own devices, but major challenges persisted even where youth and refugees received technical and financial support. The ITC-NRC Refugee Employment and Skills Initiative (RESI) in Kenya's Dadaab and Kakuma camps, for example, has trained refugees in digital skills and connected them to online web-based platforms.

Despite some successes among workers who generated a livelihood on digital labour platforms, beneficiaries spoke of **significant challenges**, including unreliable electricity supply and internet connection, a lack of access to suitable hardware and software, exclusive ID verification requirements at platforms alongside slow government bureaucracies in renewing refugee IDs, as well as difficulties in building language skills and other competencies needed to succeed. These skills include knowledge about bidding for jobs, pricing one's services, and communication with clients. RESI staff also lamented a difficulty to build the "right mindset" among refugees, who may have good reasons for not wanting

to take risks and invest weeks of unpaid work time and efforts into accessing their first few tasks. This indicates that training in freelance work often implicitly adopts curricula that mirror the business models of platforms, which force workers to invest unpaid time and financial resources into building their profile and reputation. **Training for online freelancing often operates with a somewhat problematic assumption that individual refugees must be willing to take on risks and pursue their goal of building their profile without any security or guarantee of financial returns. Moreover, some refugee workers reported widespread discrimination on platforms, as well as a high level of competition. Another key problem is that online freelancing often takes place during unsocial hours owing to time zone differences** between the US, from where most jobs are posted, and the locations in which youth and refugees live. With **electricity and internet supply being restricted** or unavailable at night in refugee camps and settlements, this temporal dissonance poses a significant problem.

Manual and low-skilled work for on-demand location-based platforms such as Tukole or Lynk are often easily accessible, but as the 33-year-old Congolese refugee Benjamin in Uganda explained, this line of work requires mobility and transportation into and beyond urban areas, and such mobility can be costly. National travel restrictions during the COVID-19 pandemic have also **restricted refugee movements and limited their livelihood strategies.** This problem was paralleled by health and safety concerns in location-based platform work that involves face-to-face interactions and work in households during the COVID-19 pandemic, as well as a lack of health insurance and social protections.

Those who seek to step up from doing freelance work to become entrepreneurs **also struggle to realize their dream of starting a business from a refugee camp or settlement**, where basic infrastructure is lacking and the prospect of acquiring investment is often highly unlikely. For example, the 24-yearold Congolese refugee Rose, who lives in Nakivale settlement in Uganda, made between US\$60 and US\$90 a month selling shoes online but needed funding and more training to grow her business. In the meantime, she developed a passion for online work and turned to freelancing to complement her livelihoods strategy. **This and other cases indicate that online freelance work becomes a necessary supplementary source of income in places where business cannot grow.** In a similar vein, a 50-yearold refugee from Burundi, who lived in Kampala and worked as a freelance language conversation partner for NaTakallam, ran an informal business with his wife locally next to his online work, primarily by using Whatsapp groups and networks in the local community.

There is a tendency for **higher skill levels to mean less enthusiasm about the prospect of online freelancing, not least because decent employment should be a realistic expectation.** The 23-year-old Egyptian woman Margret has a computer science degree from a university and participated in trainings at ITI, which prepared her for the job market and taught technical as well as practical skills. She found work as a digital marketing officer with a university, but despite this highly skilled background, she never managed to land a job on Upwork or other digital labour platforms such as Khamsat. The only freelancing she did was through informal local networks. Her assessment of the lack of quality in freelancing encapsulates a wider problem that can be considered central to the digital platform economy: "As a freelancer, even if I am brought onto to a project with a team, each person works on their own tasks so there's no exchange, there's no soul to it you feel. (...) In Egypt there are a lot of problems for freelancers – there's no protection or insurance for freelancers. I haven't had many jobs in freelancing but from what I've experienced so far and witnessed from friends, it was be quite risky to be a freelancer in Egypt."

The way forward

Incubation and intermediation

This report identifies incubation and intermediation as key pillars of future efforts to support refugees and youth within the digital platform economy, while working towards ensuring more decent conditions. **Incubation** is not only a principle of supporting aspiring entrepreneurs and their start-ups, so they can develop their business until it is ready to be realized, but it is also a principle that can been applied to work on digital platforms. Such incubation can include the formation of freelancing agencies that have a dedicated aim of supporting members and adhere to fair work principles, acting on behalf of workers while "incubating" them within a supportive environment and mediating between workers and the market. Another example for incubation is social impact outsourcing companies and non-profit organizations, which protect a cohort of workers from open competition externally, for example by negotiating pricing on their behalf, while supporting them internally with training, insurance, and mentoring. Intermediation can be understood as mediating facilitating transitions into and within the digital economy where there would otherwise be insurmountable barriers. Digital skills training institutions create such transitions, especially where they are linked to real job opportunities; and freelancing agencies and social impact platforms act as intermediaries that link individual workers up with clients in a market that requires leverage, skill, and networks to succeed. Such intermediation is crucial because the cost of upskilling and reskilling is often transferred to the workers themselves in the digital platform economy.

Incubation and intermediation will be crucial in facilitating two fundamental transitions that are necessary to improve the development outcomes of inclusion in the digital economy. The first of these transitions is the initial inclusion of youth and refugees in the digital economy: the transition from unor underemployment to digital employment and livelihood generation. The second transition aims to transform indecent and precarious digital labour and informal business towards formal and decent conditions. Without efforts in incubation and intermediation, both these transitions are unlikely to succeed for most beneficiaries, and digital inclusion will leave many of the most marginalized youth and refugees behind, while subjecting those who aim to succeed to a risky game of "survival of the fittest" in a competitive transnational marketplace. The 46 interviews we conducted with a variety of actors, including digital platforms and skills-training providers, highlighted that outcomes of digital economic inclusion are best where intermediation or incubation are the strongest.

Rethinking protection

Some of the ILO's key conventions and recommendations, including its fundamental principles and rights at work, are applicable to all workers: "irrespective of whether platform workers are classified as employees or as self-employed, they should enjoy the right to associate, to bargain collectively, and to be protected against discriminatory conduct and unsafe workplaces. They should be provided with health and safety protection and social security and be guaranteed a range of other key rights at work".³⁵ The particular political and economic context of refugees complicates the practical application of social protection and decent work, since historically, many refugees have been confined to informal economies without many of the privileges that citizens and other workers enjoy. In many host countries, refugees do not have the unconditional right to work or start a business, and their claims for better working conditions are not usually recognized by governments. Any effort to address protection gaps in the digital economy among refugees must therefore be coupled with a process of more generally improving their access to labour rights. At the same time, there may be a need to rethink protection in new creative ways, alongside the more formal policy-level process that aims to work towards a better understanding of how working conditions and employment relationships are governed for refugees in the platform economy. Identifying underlying principles of support and protection that are already practised across the many efforts in using

³⁵ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 248.

the digital economy for job creation and entrepreneurship seems crucial, because future interventions will need to rethink protection along new lines until larger reforms and progress have been achieved. In a space where conventional mechanisms of social protection, such as trade unions or national insurance schemes, are widely absent, a key question is how can decency and formality be applied within a digital economy in the face of these inherent limitations. The research behind this report identified several prototypes for rethinking protection that are especially relevant for refugees and other marginalized segments of the population, while taking into consideration the policy positions of both worker and employer organizations.

- Algorithmic fairness and distribution of work. Some platforms, such as the location-based ondemand platform Lynk in Kenya, run algorithms for work allocation that take needs into account, for example by prioritizing workers who have had fewer work offers than others. Innovating blueprints for fairer algorithms that allocate work and match clients with workers should be a priority for future action. This also includes the way in which work is allocated and distributed among workers on freelance and microtask platforms, which should be as equitable as possible.
- Social dialogue, collective bargaining and freedom of association. All workers, including platform workers, enjoy the rights to organize and engage in collective bargaining and platform workers can associate in a broad variety of organizational forms. Basic principles of social dialogue, ie. negotiations between worker and employer organizations, have yet to emerge substantially in the digital platform sector and are not been applied for refugee platform workers. Local organizations such as the Dadaab Collective Freelancing Agency offer some level of support for individual workers on labour platforms, while being able to negotiate with platform operators to reduce access barriers.
- Intermediation and brokerage: Social impact platforms, worker cooperatives and other intermediary organizations such as Digital Lions and Humans in the Loop acquire clients, negotiate pricing and distribute work fairly across individual workers. Until platforms classify workers as employees, or until national law imposes such a classification, alternative intermediary organizations could step in to employ them and implement cooperative principles vis-à-vis the platform. Research on worker cooperatives that support and effectively employ freelancers found that these can offer workers the "collective capability to reduce the various forms of uncertainty affecting them", including income instability and a lack of access to benefits and social security.³⁶ Intermediary organizations can engage further with worker organizations and continue act as a buffer between the digital marketplace and the workers. However, this support and mediation does come at a cost, with commissions charged to workers' earnings by social impact platforms ranging from 10 to 50 per cent.
- Fair work principles. While the ILO and international efforts such as the Fair Work Foundation are pushing for more decent working conditions on digital labour platforms, few platforms have explicitly committed themselves to fair work policies. Where they do, as in the case of social enterprise Humans in the Loop, these policies not only create a blueprint for fair conditions but also set a replicable precedent that can be adopted elsewhere.

³⁶ Julien Charles, Isabelle Ferreras, and Auriane Lamine, "A Freelancers' Cooperative as a Case of Democratic Institutional Experimentation for Better Work: A Case Study of SMart-Belgium", in *Transfer: European Review of Labour and Research* 26, 2 (1 May 2020): 157–74. https://doi.org/10.1177/1024258920919686.



David, a refugee in Kakuma, studying accounting online. ©Vodafone Foundation & UNHCR/Sala Lewis

- Insurance schemes. In the absence of employer contributions to social protection among many platform workers and informal entrepreneurs, there is a need to fill the gap by establishing insurance schemes that individual refugee workers and entrepreneurs can link into. This includes the need for access to social security coverage, healthcare and sickness benefits during periods of ill health, and income support in the event of unemployment and loss of earnings. Greater state intervention and cooperation with major development partners is needed to guarantee the human right to social security in the digital economy.
- Mentorship. Many digital skills initiatives and some e-commerce and digital labour platforms offer access to mentorship by experienced professionals, thereby offering an opportunity to rethink mentorship on a large scale as a key pillar of support. This could be further developed and institutionalized with the help of funding.
- Match-funding for entrepreneurship. A lack of investment into small start-ups is a major obstacle for entrepreneurial success across the three study locations, suggesting that schemes that offer matchfunding and other incentives for investment are urgently needed.
- Business formalization. Some e-commerce platforms have a deepening involvement in the management of small informal businesses, offering resources that support them in fulfilling basic requirements for a formal business, such as bookkeeping. There is an opportunity to use the influence and reach of online marketplaces to engender transitions from informal to formal entrepreneurship.

Introduction



Indeed, an increasing number of refugees are working on digital labour platforms and participate in coding schools and digital skills programmes. The digital labour currently carried out by refugees classifies and annotates images to train artificial intelligence behind driverless cars, translates documents, offers language classes, delivers food, designs websites, and writes the code for software, to cite some examples. Besides those who are already engaged in the digital sector, there are many others who feel inspired to work on digital labour platforms, but they struggle to succeed: the "fast lane" to employment and prosperity that the digital economy promises often ends up being not so fast after all.³⁷ As refugees often lack the connectivity, hardware, bank accounts and skill sets to succeed, the digital economy can reinforce the deeply rooted social and economic inequalities that govern their lives.

³⁷ Philip Rushworth and Andreas Hackl, "Writing Code, Decoding Culture: Digital Skills and the Promise of a Fast Lane to Decent Work among Refugees and Migrants in Berlin", in *Journal of Ethnic and Migration Studies*, 2021.

Importantly, refugees are only one particular segment of young people in Africa who look at the digital economy as a promising source of employment and income generation. Digital skills training and digital labour platforms are potential drivers of economic development and youth employment in Africa, but citizens and non-citizens alike face significant obstacles to realizing their aspiration to make a living in the digital sphere. What refugee status is for forcibly displaced persons, different layers of inequality and marginalization is for youth more generally: access to digital economies and the capacity to succeed is unevenly distributed between cities and rural areas, between genders and age groups, as well as between different regions and countries.

This report investigates what current and future potential the digital economy has to unlock new pathways for decent job creation and poverty reduction for young people in Africa, with a particular focus on refugees in three countries: Kenya, Uganda and Egypt. Despite the growth and spread of the digital economy in many parts of Africa, persistent inequalities pose significant challenges for economic inclusion and decent job creation. These challenges include the unequal spread of internet connectivity, inequalities in digital skills and digital literacy, alongside the specific obstacles that many refugee populations face in accessing digital economies and decent digital work. These refugee-specific obstacles include, among others: discrimination and structural disadvantages in the labour market; restricted financial inclusion; a frequent lack of verifiable identification documents; and other socio-economic challenges that result from the wider condition of forced displacement. This context means that the opportunities provided by digital labour platforms must be examined from a perspective grounded in the particular experience of refugees, while also acknowledging the overlaps between this particular position and the experiences of other people who for various reasons are marginalized vis-à-vis digital economies.

The digital platforms face new opportunities and challenges, too. As some sectors, such as ride-hailing and other face-to-face on-demand services, have suffered during the COVID-19 pandemic, other areas such as online retail and delivery have flourished. The pandemic also led some social impact-oriented digital employment initiatives to lose funding, clients and partnerships, forcing some to put operations on hold or downscale their efforts. Interviews conducted for this report showed that there is a will to contribute to job creation and economic inclusion of youth, even among those digital labour and e-commerce platforms that currently do not support refugees or other underserved communities. Yet, many digital labour and online outsourcing platforms and their clients refer to stringent ID verification requirements, skill gaps and other problems they associate with onboarding refugees in particular, and migrants more generally. Future interventions that seek to create a more inclusive and fair future of work in the digital economy will need to address barriers to inclusion into the digital economy on both the supply and demand sides.

This report aims to contribute significantly to the field of research on digital labour in Africa more generally, and the under-researched field of refugees in the digital economy in particular. This is significant since "the lack of critical and Africa-specific academic research also severely constrains both the macro- and micro-level understanding of the desirability, dynamics, promise and means to elevate digital gig work into a means for development".³⁸ While the research behind this report is geared towards identifying opportunities for future intervention and partnerships, it is equally important to identify the underlying barriers and risks. Without being grounded in solid evidence, the digital upskilling and inclusion of refugees and marginalized youth into the largely unregulated digital economy risks building bridges into unknown territory.

³⁸ Pitso Tsibolane, Jean-Paul W. Van Belle, and Selina Linda Mudavanhu, "Digital Gig Work in Africa: An Exploratory Survey", 8.

Digital platforms and the decent work agenda: creating transitions, strengthening intermediation, rethinking protection

One of the key challenges remains how to transform often sub-standard and precarious employment in the digital economy into sustainable decent work, as well as formalizing largely informal business activities. The PROSPECTS partnership initiative, of which this research is part, is working towards this aim, through a shift in efforts from a focus on purely humanitarian assistance to forced displacement and offering long-term development prospects that include the host communities. This report will show that there is already a large diversity of pathways for refugees into the digital economy. But it will also show that these pathways are scattered with uncertainties and obstacles, and that they often lead to informal employment and self-employment that are far away from a normative understanding of decent work. Creating transitions and strengthening intermediation are two of the key areas in which the ILO's decent work agenda can become manifest within a largely informal and unregulated digital platform economy.

Building transitions

The digital economy, when viewed from the perspective of refugees and disadvantaged youth in Africa, requires support to enable at least two transitions. The first is the transition from unemployment to digital work or e-commerce, which requires certain preconditions, such as connectivity and literacy, as well as upskilling and other forms of support. Because most work and business currently carried out in the digital economy is informal and lacks decent working conditions and protection, a second transition becomes necessary: the transition from informal work to formal employment with decent working conditions, or, in the case of entrepreneurship, the transition from informal small-scale entrepreneurship to a formal sustainable business.

It is useful to understand the deficits of work in the digital economy among young people as a continuation of the long-standing issue of informality. Among working youth aged 15 to 29 in developing countries, a staggering 96.8 per cent of all young workers are in the informal economy.³⁹ Informal economies also have a tendency to entrap youth in informality for longer periods, making it difficult to obtain formal employment. Amid the prevalence of informal economies, the objective to transitions to formality forms part of the 2030 sustainable development agenda and is a core area of the ILO's operation. Interventions in this area can include skills training, accreditations of informal skills, interventions that put youth into a good first job, or wage subsidy programmes to encourage employers to hire youth. Given the prevalence of informality and decent working conditions can be supported. This will be crucial for the future of work among youth, not least because "policies aimed at the transition of young people to formality affect not only a worker's current situation, but rather the lifetime formality profile of that individual".⁴⁰

Rethinking protection

The business models of most platforms classify workers as self-employed or independent contractors. As self-employed, the worker is responsibile for his/her social security, including health insurance and pension. Digital platform operators sometimes charge commission and subscription fees, and there are few mechanisms through which workers can challenge their working conditions and organize collectively.

³⁹ Decent Jobs for Youth, Thematic Plan *6: Youth Transitioning to the Formal Economy*, n.d., 4. https://www.decentjobsforyouth. org/wordpress/wp-content/uploads/2017/08/Thematic-Plan-6-Youth-transitioning-to-the-formal-economy.pdf.

⁴⁰ Juan Chacaltana, Florence Bonnet, and Vicky Leung, *The Youth Transition to Formality* (Geneva, 2019), 17. https://www.decentjobsforyouth.org/wordpress/wp-content/uploads/2019/11/Edit_EF_Youth-transition-to-formality-17-April-2019_DJY-format_rev_DS-1.pdf.

This allows platforms to provide labour at low cost to its clients, and the role of automated processes that are prone to exclude those who do not fit into the pre-defined frame increases with the scale of platforms, with one example being the blanket exclusion of entire nationalities, or non-citizens, from many platforms.

This context demands answers to the question: What is the place and role of the decent work agenda within a digital platform economy that faces decent work deficits and often times disconnected from traditional protection mechanisms? Without a straightforward and simple solution, answers to this question will require creativity and flexibility. These include the need to establish traditional support and protection mechanisms in this unregulated digital economy, such as social dialogue mechanisms and insurance funds. ILO research has provided a comprehensive overview of policy innovations that reinscribe social protection into non-standard forms of digital employment, such as expanding social insurance coverage to the self-employed, including healthcare and sickness benefits, long-term care, invalidity benefits, maternity benefits and family benefits.⁴¹ At the same time, there is a need to develop new mechanisms that can support workers in the digital economy in places where such national policy innovation remains absent.

One can argue that rethinking protection for refugees and other marginalized populations within the digital economy should take place along at least two linked axes: incubation and intermediation. In addition to conventional incubation of start-ups, incubation can be applied to workers more generally, to protect them from the competition of the market at an early stage, while supporting their skills development. In theory, such incubation can also be long-term, in the sense of social enterprises that mediate between the open market and a supported cohort of workers. There is thus a need for strong intermediaries that support workers internally, as in incubation, and externally, vis-à-vis clients and platforms. One example for this is a workers' association or cooperative that can bargain for higher prices on behalf of workers and establish internal support mechanisms.

Research questions

This ILO-commissioned research is designed to inform the success and feasibility of future interventions in the PROSPECTS partnership. In its aim to achieve this goal, the research followed six guiding research questions.

- 1. What opportunities do digital labour platforms and e-commerce offer for promoting decent work and economic inclusion among refugees and host community youth?
- 2. In what sectors and occupations in the digital economy are refugees and youth currently active, and what challenges do they face?
- 3. What factors and barriers limit the access of refugees and youth to digital labour platforms and e-commerce? What factors pose potential risks of exploitation and poor working conditions for those who have basic access and digital literacy?
- 4. What is the current state of the digital economy in Kenya, Uganda and Egypt, and how can the available platforms be classified with respect to their suitability for promoting decent work and entrepreneurship among refugees and disadvantaged young people?
- 5. How can refugees and youth transition from informal self-employment in the digital economy into more secure, decent and formal forms of employment?
- 6. What are the recommendations and concrete actions for governments, international development organizations and employer and worker organizations to improve decent work opportunities for young refugees in the digital platform economy through policy reforms, regulations and the establishment of guiding principles?

⁴¹ Christina Behrendt and Quynh Anh Nguyen, "Innovative Approaches for Ensuring Universal Social Protection for the Future of Work", ILO Future of Work Research Paper Series (Geneva, 2018). https://www.ilo.org/wcmsp5/groups/public/---dgreports/--- cabinet/documents/publication/wcms_629864.pdf.



Methodology



Together with a desk review and a mapping of key actors, the research team conducted 46 semi-structured interviews with digital labour and e-commerce platforms, digital skills-training providers, refugees engaged in the digital economy, government officials and experts in international organizations. While the presence of social partners is limited in the refugee setting in the three countries, the research did include intermediary organizations and refugee worker cooperatives like the Dadaab Collective Freelance Agency. A process of mapping important actors in the digital economy of the three study locations accompanied the empirical research. The aim of the mapping process was not so much to identify every single relevant actor that operates in the digital economy, but rather to identify key actors for more detailed discussion to inform the overall qualitative analysis.

The digital economy: refugees, youth and the digital divide

The digital economy encompasses a wide variety of work forms and entrepreneurial activities. Therefore, definitions about what constitutes digital labour vary. In the wider sense of the definition, one can follow the Republic of Kenya's broader concept of the digital economy as "the entirety of sectors that operate using digitally-enabled communications and networks leveraging internet, mobile and other technologies".⁴² As the ILO writes, building on the OECD's definition, the digital economy "incorporates all economic activity reliant on, or significantly enhanced by the use of digital inputs, including digital technologies, digital infrastructure, digital services and data. It refers to all producers and consumers, including government, that are utilizing these digital inputs in their economic activities".⁴³ Within this wider digital economy, digital platforms are online entities providing digital services and products that facilitate interactions between two or more distinct but interdependent sets of users, such as firms or individuals, who interact through the service via the internet. These interactions can include exchange of labour, goods (e-commerce) or software.⁴⁴ Although the platform economy has come to dominate the literature on digital economies in international development, the wider digital economy also consists of potentially decent jobs in full-time employment, done locally or remotely, that are not necessarily gig work and can offer fair working conditions. One example of this would be a job as a junior software developer with a tech start-up. Admittedly, these jobs are often difficult to enter and pose significant skill barriers for a large part of Africa's young population.

The focus in the following will be primarily on work and business opportunities on two kinds of platforms: digital labour platforms and e-commerce platforms. Digital labour platforms include online web-based platforms, where tasks are performed online and remotely by workers, and location-based platforms, where workers operate locally through a mediating digital platform.⁴⁵ A prominent example for the former would be Upwork, while Deliveroo or Uber are examples for the latter. E-commerce platforms can be business-to-business (B2B) or business-to-customer (B2C); they can include retail platforms through which SMEs can sell goods to customers, or platforms catering to the agricultural and manufacturing

43 OECD, "A Roadmap toward a Common Framework for Measuring the Digital Economy". Report for the G20 Digital Economy Task Force, 2020; ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work.

44 ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 33.

45 Ibid., 43.

⁴² Republic of Kenya, Digital Economy Blueprint: Powering Kenya's Transformation, 17.

sectors. Importantly, e-commerce platforms are not only used by formal businesses but also by informal entrepreneurs. In addition to these conventional platforms, SMEs and individual entrepreneurs use social media platforms to market goods and reach a wider customer base. Moreover, social media platforms such as Whatsapp or Facebook are used to access online web-based work while bypassing "official" platforms.⁴⁶ As for refugees specifically, they have conducted online remote work through mediating social enterprises that differ from corporate platforms. These social impact platforms in fields such as language services and AI data training often have a dedicated support structure in place for refugees, and mediate between them and potential clients.

The ILO's flagship report on digital labour platforms offers a comprehensive analysis of the platform economy from a global perspective.⁴⁷ While the growth of platform companies is concentrated in certain parts of the world, workers in developing countries have emerged as a growing cheap labour force. The platform economy has given rise to an entrenchment of unequal global economic geographies, whereby work is outsourced through platforms by businesses in the global North and performed by workers in the global South.⁴⁸ These developing countries and the workers in them face major challenges owing to shortcomings in digital infrastructure, alongside inadequate financial infrastructure, human resources and institutional capacities.⁴⁹

The platform economy has played a particularly strong role for employment among youth. Indeed, the average age of workers on web-based digital platforms is 31, while it is 36 for on-demand taxi services and 29 for delivery.⁵⁰ Moreover, youths are more likely to have high digital literacy and are therefore seen as particularly suited to become new entrants for the digital economy. Despite these opportunities, many inequalities persist. As digitalization is rapidly changing the character of work around the world,⁵¹ the digital economy has widened some regional and gender divides, while digital labour platforms could recreate "nineteenth-century working practices and future generations of 'digital day labourers'".⁵² When digital inequalities are becoming more ingrained and insidious, they leave those without resources ever further behind.⁵³ Digital work can contribute to strong disparities related to geographic location, whereby workers in emerging nations are most affected by uneven internet connectivity, time zones, language, security and pay mechanisms.⁵⁴ To benefit from the positive potential of this digital transformation for the future of work and reduce its harmful impact, global action and planning must give more attention to populations that are economically and politically marginalized, such as refugees and disadvantaged young people. The current digital transformation has far-reaching implications for forcibly displaced persons, who are often one of the most vulnerable groups in the labour market.⁵⁵

The digitalization of work plays a particular role for refugees and for migrants more generally. Digital labour platforms have been attributed specific benefits for migrants, who often struggle to enter local labour markets. Indeed, "migrant workers provide a large share of the labour power behind a range of gig economy services".⁵⁶ In a paper that explores the important relationship between migration and gig work, Van Doorn, Ferrari, and Graham explain the significance of digital platforms for migrants.⁵⁷

46 Ibid., 151.

47 Ibid.

- 48 Ibid., 44.
- 49 Ibid., 34.
- 50 Ibid.
- 51 ILO, "Technological Changes and Work in the Future: Making Technology Work for All", Future of Work: The Centenary Initiative (Geneva, 2016). http://www.ilo.org/global/topics/future-of-work/WCMS_534201/lang--en/index.htm.
- 52 ILO, Work for a Brighter Future: Global Commission on the Future of Work (Geneva, 2019), 18. https://www.ilo.org/wcmsp5/ groups/public/---dgreports/---cabinet/documents/publication/wcms_662410.pdf.

53 Laura Robinson et al., "Digital Inequalities 3.0: Emergent Inequalities in the Information Age", in *First Monday* 25, 7 (2020).

54 Ibid.

55 UNHCR, Global Trends: Forced Displacement in 2019, 2020. https://www.unhcr.org/5ee200e37.pdf.

56 Niels van Doorn, Fabian Ferrari, and Mark Graham, Migration and Migrant Labour in the Gig Economy: An Intervention, 2.

57 Ibid., 4–5.

- > The onboarding process for labour platforms is low threshold and ostensibly indiscriminate.
- These platforms are often "lax with respect to their enforcement of formal requirements", such as background checks or business licences of workers.
- The ability to work through platforms in English can offer additional inclusive potential that evades the requirements of learning local languages among the displaced.
- Some location-based platforms in delivery or ride-hailing allow migrant workers flexibility in cashing out money, and offer a degree of autonomy in deciding when to work and when not.

The particular experience of refugees mirrors some of these aspects while challenging others. The frequent categorical financial exclusion of refugees from banking makes "cashing out" payments from work difficult where mobile money is not always readily available. The ostensibly "indiscriminate" onboarding onto digital platforms does not apply in the same way to refugees, who often lack documentation to meet platforms' Know-Your-Customer (KYC) requirements or face restricted access because of legal and work permit issues related to nationality or refugee status and other issues related to their physical location, as some platforms of workers as self-employed has ambivalent implications for migrants and refugees, because it provides simultaneously a potential grey zone in what could be considered otherwise restrictive labour laws. In Italy, Uber Eats has recently come under scrutiny for the exploitation of vulnerable migrants and refugees, with a prosecutor saying that the "strong social isolation in which these migrant workers live" was seen as "an opportunity to recruit workers at outrageously low cost, given their tendency to do anything to survive, and who are exploited and discriminated against by unscrupulous employers".⁵⁸

Understanding the digital economy from the perspective of refugees allows us to see how the inclusivity of platforms intersects with such decent work deficits, revealing a largely understudied aspect of the digital divide. Following Caribou Digital's interpretation of Hargittai's term "second-level digital divide",⁵⁹ one can argue that refugees help us to see yet another hidden layer of these divides. Importantly, such divides are not remedied by simply providing equal digital access to everyone, because many "gaps persist" and "may be amplified, even after the initial access challenges might seem to be addressed".⁶⁰ The inequalities that determine these persistent gaps are in part a question of skills and access to hard- and software. But on a more structural level, they pertain to the wider infrastructural, political, economic, and legal forms of marginalization that affect forcibly displaced persons.

From refugee economies to digital livelihoods: old informality in new form

Informal work is widespread in many African economies and has been particularly consistent in refugees' economic activity, particularly in places where their right to work in the formal economy is restricted. More than six workers in ten and four enterprises in five in the world operate in the informal economy, and such informality has not diminished over time but increased in many places.⁶¹ Informal work has been particularly widespread among migrants and refugees. Overall, refugees face widespread restrictions to their right to work, suffer from restricted geographical and social mobility, and frequently work in informal sectors under exploitative conditions in a cash-based local economy.⁶²

Individual countries have different policies which can fundamentally impact the capacity of refugees to obtain employment legally and formally. In Uganda, for example, refugees have been allowed to settle in host communities in rural and urban areas outside camps "and some have been granted arable land

⁵⁸ Lorenzo Tondo, "Uber Eats in Italy Investigated over Alleged Migrant Worker Exploitation".

⁵⁹ Caribou Digital Publishing, *Digital Lives in Ghana, Kenya and Uganda* (Surrey, 2015); Eszter Hargittai, "Second-Level Digital Divide: Differences in People's Online Skills", *First Monday* 7, 4 (2002). https://doi.org/10.5210/fm.v7i4.942.

⁶⁰ Caribou Digital Publishing, *Digital Lives in Ghana, Kenya and Uganda*, 6.

⁶¹ https://www.ilo.org/global/topics/employment-promotion/informal-economy/lang--en/index.htm.

⁶² Betts et al., "Refugee Economies".

for agricultural production; this has contributed to social and economic integration of refugees".⁶³ The informal component of refugee economies also includes inter-ethnic networks, as among Somali refugees in Uganda and Kenya, who often obtain employment from Somali owners of businesses.⁶⁴ Generally speaking, the market economy matters less in camps than in urban areas, where high living costs and the availability of many informal jobs makes work a priority. It becomes evident that the current inclusion of youth and refugees into largely unregulated forms of self-employment and freelancing in the "new" digital economy are not really new as far as precarity and informality are concerned. What is new is that e-commerce and digital labour platforms have added a transnational and sometimes global dimension to this informality.

One of the main challenges faced in this digital economy is the unclear employment relationships, the unregulated nature of self-employment, precarity, and informality. One of the key questions, then, is what opportunities are there to better delimit employee-employer relationships and provide social protection through the adoption of legal frameworks and new policy developments.⁶⁵ While this is a struggle even without considering the specific marginality of refugees, many of whom are not allowed to work or face challenges obtaining work permit. Those who are able to establish an economic activity do so in the informal economy, which to a large extent does not allow them to receive employment protections provided by national regulation.

The promise of the digital gig economy to provide work to anyone with the right skills and internet connection, practically from anywhere, appears especially significant in a context of the labour market restrictions, discrimination and mobility restrictions faced by many refugees. It is not only the task of finding a decent job that poses challenges for refugees who live in camps and rural areas, but also the task of getting to places where jobs exist. Although Uganda formally allows free movement, since permits to move outside the settlements are free, many refugees cannot afford to pay for transportation.⁶⁶ Digital labour platforms would, in theory, make the need for moving elsewhere obsolete, while allowing refugees to work from camps and from their homes in towns, but the reality is more complicated, owing to a range of obstacles. These can include a low quality of internet connections in marginalized areas and the absence of the right skills to compete in digital economies. As the next section will show, there currently are major investments under way across Africa to develop the ICT infrastructure and preconditions for the digital economy to put down roots outside of major urban centres. But the way forward is likely to be long and difficult.

⁶³ Roger Zetter and Heloise Ruaudel, Refugees' Right to Work and Access to Labor Markets - An Assessment, 2016, 18.

⁶⁴ Ibid., 24.

⁶⁵ Behrendt and Nguyen, "Innovative Approaches for Ensuring Universal Social Protection for the Future of Work".

⁶⁶ Zetter and Ruaudel, Refugees' Right to Work and Access to Labor Markets – An Assessment, 17.

Digital economies in Africa

Africa is a diverse continent with an unequal spread of infrastructural and labour market capacities to benefit from the digital economy. Indeed, according to the ITU, internet usage rates range from more than 60 per cent in the more developed economies to less than 10 per cent in the region's least developed economies. Mobile cellular coverage in Africa lies around 88.4 per cent, with some 77 per cent of the population living within reach of a 3G signal. The percentage of Africans using the internet increased from 24.8 per cent in 2017 to 28.6 per cent by 2019, "with households that have internet access at home increasing by 0.1 percentage points, from 14.2 per cent in 2017 to 14.3 per cent by the end of 2019".⁶⁷ While these are by no means encouraging numbers, the upward trend suggests a growing capacity to go online. However, there is a significant and persistent gender gap and a rural/urban divide, despite a steady growth in connectivity, with the ITU writing that only 20.2 per cent of women used the internet in 2019, compared with 37.1 per cent of men. While only 6.3 per cent of rural households had access to the Internet in 2019, the share was 28 per cent in urban households.⁶⁸

Against this backdrop, the African Union and the OECD argue that "the digital transformation could help African societies to open up, encourage productive entrepreneurship, promote transparent governance, diversify economies – making them more resilient to macroeconomic shocks – and foster regional integration".⁶⁹ However, the report also notes that digital sectors create few jobs, and these are not sufficient to meet Africa's employment needs, and that "the digital ecosystem will not provide enough jobs for all young Africans in the near future".⁷⁰ There is, nonetheless, a powerful promise of digital economies in Africa that is seen as a suitable response to a rising population of unemployed youth and a large informal sector, which makes the under-regulated digital economy appear like an inclusive and readily available solution. As some 85 per cent of employment in Africa is already informal, this may mean that many informal workers do not perceive the spread of digital labour and commerce as a threat ("removing rights they do not have") but may see it as an opportunity, according to the Mastercard Foundation.⁷¹

⁶⁷ ITU, Digital Trends in Africa 2021: Information and Communication Technology Trends and Developments in the Africa Region 2017–2020, 3–4.

⁶⁸ Ibid., 4.

⁶⁹ OECD and AU, Africa's Development Dynamics: Digital transformation for Quality Jobs, 5.

⁷⁰ Ibid., 46.

⁷¹ MCF, Digital Commerce and Youth Employment in Africa, 5–6.

This indicates a susceptibility to decent work deficits that makes it all the more important and urgent to transform digital labour into formal, well protected, and decent work. This prevalence of informality, paired with low wage levels and the absence of strong local labour markets that can absorb skilled and semi-skilled youth, poses challenges for a normative approach that dismisses the online gig economy as indecent and risky. To be sure, there are many risks and indecent working conditions – but since the mass inclusion of African youth and refugees into the digital economy is already underway, the key question will be how to simultaneously continue this trend and offer more protection.

The digital platform economy

In this report, the digital economy is understood to include digital employment, including gig work, and e-commerce or digitally enabled trade. Digital gig work is becoming increasingly important as a potential pathway to socio-economic development and unemployment alleviation in Africa, which is the continent with the youngest population and high youth unemployment and underemployment rates.⁷² This rise of informal platform work in Africa has inspired some to say that improving the working conditions of independent workers in the informal sector is the crucial factor in the future of growth: the gig economy is meant to be where Africa's youth bulge will find livelihoods.⁷³ The online gig economy shares characteristics with the "offline" gig economy, namely the more traditional informal sector. For example, the capital required to set up informal businesses is usually low, and the formal skill requirements for informal work is less than in the formal labour market.⁷⁴ While the gig economy in Africa certainly has benefits, it appears misquided to state – as does the Centre for Global Development– that "people prefer gig work anyway".⁷⁵ The ostensibly positive sense of "flexibility" that is often associated with platform work is countered by the ambivalent experience of platform workers. Drawing on data from around 12,000 workers, the ILO showed that many workers are dependent on platforms as their main source of income, while experiencing many challenges to worker well-being, such as: a lack of sufficient work owing to excess labour supply, as well as direct exclusion by platforms or clients affecting workers in developing countries alongside costly fees.⁷⁶ Therefore, the positive aspects of gig work, such as inclusivity, accessibility, and flexibility, should not distract from the need to reconceptualize gig work from a perspective of sustainable development: how can marginalized people and vulnerable youth be empowered to benefit from the gig economy in a way that leads to decent working conditions?

This question appears important if one considers the extent of which digital labour platforms are already deeply embedded in some African countries. According to the Ajira Digital Program, a government initiative driven by the Kenyan Ministry of ICT, Innovations and Youth Affairs, at least 40,000 Kenyans are registered on Upwork.⁷⁷ Another source as far back as 2014 stated that 40,000 Kenyans were registered on Elance (now Upwork), suggesting that the current numbers are likely to be far higher.⁷⁸ Interview sources in Egypt estimated the number of workers on Upwork at around half a million. This rise in online freelancing is a mixed blessing, since work opportunities on digital labour platforms are not endless

77 https://ajiradigital.go.ke/about_ajira

⁷² Pitso Tsibolane, Jean-Paul W. Van Belle, and Selina Linda Mudavanhu, "Digital Gig Work in Africa: An Exploratory Survey".

⁷³ Amolo Ng'weno and David Porteous, Let's Be Real: The Informal Sector and the Gig Economy Are the Future, and the Present, of Work in Africa, 2018, 1. https://www.cgdev.org/sites/default/files/lets-be-real-informal-sector-and-gig-economy-are-futureand-present-work-africa_0.pdf.

⁷⁴ Ibid., 2.

⁷⁵ Ibid., 4.

⁷⁶ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 191.

⁷⁸ E. Melampy, Online Outsourcing: How Can Developing Countries Benefit?

and competition is already fierce. Research on digital labour in Kenya and South Africa confirmed that digital gig workers "face intense competition within their countries and globally. This contributes to high employment insecurity and very uneven income streams."⁷⁹

It is not only competition that raises concerns about work in the platform economy from the viewpoint of Africa. In evaluating the development potential of platform work in Africa, Tsibolane, Van Belle and Mudavanhu offer a number of useful "issues" that are seen to limit the realization of this potential on micro and macro levels.⁸⁰ Among the cited macro-level issues are low internet access, weak ICT infrastructure and electricity supply; low educational levels and IT skill; a lack of visibility and awareness of platforms; a lack of suitable payment systems, and a lack of government policy and labour regulation of platform work. The micro-level issues they refer to include "low-employee self-efficacy", a lack of bargaining power, worker exploitation and job insecurity, the inequitable distribution and assignment of tasks, as well as discrimination and exclusion of African workers on platforms.

In addition to these micro and macro-level issues, one can add the wider lack of social protection in platform work, the misclassification of workers as self-employed, as well as a frequent skills mismatch, which is exemplified by the many highly educated platform workers who end up performing low-skill labour and repetitive tasks. Some of these issues will matter in specific ways for refugees, who tend to live in places with particularly weak infrastructure, might face limited access to bank accounts and payment systems, and are especially marginalized by government labour market policies.

E-commerce

E-commerce generally refers to the selling and buying of goods and services online, encompassing forms of digital trade, and is sometimes understood to include commerce and freelancing in the gig or sharing economy.⁸¹ Among the e-commerce platforms in Africa, Jumia is the largest, with 3,500 direct employees and 50,000 MSMEs selling on its platform.⁸² Outside these larger e-commerce platforms, micro-entrepreneurs – whether run by refugees or citizens – use various social media platforms, such as WhatsApp, Facebook, or Instagram, to promote their services.

As e-commerce booms and has become a centrepiece of the global economy, with growing numbers of people buying and selling goods online, the digital marketplace in Africa had just over 2.2 billion visits in 2019, or less than 10 per cent of the traffic on Amazon.com. Just ten African countries are responsible for almost all the traffic, and the largest and most active tend to be present only in the biggest, most advanced economies, including Kenya and Egypt. Part of the barriers that have limited the growth and inclusivity of online marketplaces is a digital divide, with large sections of the population remaining without internet access, low purchasing power among consumers, and poorly developed delivery systems. Another major barrier has been access to financial institutions, bank accounts and payment mechanisms, despite a growth of mobile money (73 per cent of Kenyans and 51 per cent of Ugandans have a mobile money account).⁸³

The wider e-commerce ecosystem comprises far more than only the platforms that mediate between buyers and sellers. It includes the digital infrastructures and services needed to conduct e-commerce, ranging from digital payment services such as PayPal to delivery services and start-up support or microlending. A widening range of platforms now offer payment services and other business processes for any vendor who would like to sell goods online, at a commission. The COVID-19 pandemic has contributed to the growth of e-commerce everywhere, and Africa is no exception, with a growing number of people

⁷⁹ Pitso Tsibolane, Jean-Paul W. Van Belle, and Selina Linda Mudavanhu, "Digital Gig Work in Africa: An Exploratory Survey," 4.

⁸⁰ Ibid., 6–7.

⁸¹ MCF, "Digital Commerce and Youth Employment in Africa", 4.

⁸² Ibid., 11.

⁸³ ITC, Business and Policy Insights: Mapping e-Marketplaces in Africa.

becoming familiar with digital marketplaces and ordering or selling goods online. However, vendors on e-commerce platforms also face challenges posed by the impact of commission fees and frequent limitations on selling across multiple platforms.

The promise of the digital economy for Africa's youth

All told, with around 262 million young people, Africa is the world's most youthful and second-most populous continent, with high youth unemployment rates, making job creation a priority and indicating that creating digital jobs will and must benefit the youth above all. Research on West Africa suggests, for example, that digitalization tends to reduce youth unemployment.⁸⁴ Moreover, openness to the global market has a generally positive impact on the youth unemployment rate across Africa.⁸⁵ Digital labour platforms and e-commerce offer a promise that some of the major constraints in income generation among Africa's youth can be bridged or circumvented. Part of the reasoning here is that online workers contracted by clients abroad, or SMEs selling goods internationally online, tap into global markets and are therefore somewhat independent from the small size of local markets and their inability to provide sufficient employment for all. Digital labour and e-commerce may still be informal, but on a transregional and transnational level.

Despite the general acknowledgment that the digital sector contributes to relatively few jobs,⁸⁶ the Rockefeller Foundation suggests that "the digital economy holds significant potential for creating formal jobs that are accessible to historically marginalized youth".⁸⁷ This includes formal jobs with higher wages and long-term stability and informal jobs in areas such as online work, impact sourcing, and e-entrepreneurship. In theory, at least, young people are best placed to succeed in the digital economy because they are most likely to have basic digital literacy, a familiarity with computers and smartphones and a willingness to absorb new skills. In reality, however, potential and actual conditions on the ground do not match. Success in youth job creation through digital economic inclusion depends heavily on external support in upskilling, connectivity, and requires suitable infrastructure.

According to the International Telecommunication Union (ITU):

Digital technologies are transforming societies and labour markets, with the potential to create new jobs in the digital economy. Africa's transition to the digital economy offers an opportunity for job-rich growth. This requires a skilled workforce, efficient labour market facilitation and an enabling business environment. However, most young people lack the skills that are in demand in the digital economy and do not have access to suitable training opportunities or job matching services, while private sector job creation is insufficient and decent entrepreneurial opportunities are hard to come by.⁸⁸

Closing the gap between Africa's youth and the demand of the digital economy will require interventions on the supply and demand side: building digital skills among the youth labour force while making more digital jobs available that match the skill levels of the supply. Moreover, intermediation is required to address skills mismatches, to support youth, and to work with platforms and governments to drive digital economic inclusion. Among refugee youth in Kenya, for example, the intermediation done by ITC and NRC between labour platforms and refugee workers has been crucial for their success. Intermediation and

⁸⁴ Nnanna P. Azu et al., "Influence of Digital Economy on Youth Unemployment in West Africa", in *Transnational Corporations Review*, 1 December 2020, 1–9. https://doi.org/10.1080/19186444.2020.1849936.

⁸⁵ Atif Awad, "Economic Globalisation and Youth Unemployment – Evidence from African Countries", in *International Economic Journal* 33, 2 (3 April 2019): 252–69. https://doi.org/10.1080/10168737.2019.1604787.

⁸⁶ OECD and AU, Africa's Development Dynamics: Digital Transformation for Quality Jobs.

⁸⁷ Rockefeller Foundation, *Digital Jobs in Africa: Catalyzing Inclusive Opportunities for Youth*, n.d. https://www.rockefellerfoundation.org/wp-content/uploads/Catalyzing-Inclusive-Opportunities-For-Youth.pdf.

⁸⁸ ITU, Boosting Decent Jobs and Enhancing Skills for Youth in Africa's Digital Economy.

support emerge as one of the key pillars of a fairer future of digital work for Africa's youth and refugees, simply because the larger structural deficiencies of digital economies will take time to be addressed by regulation and legislation on national and international levels.

The Rockefeller Foundations Digital Jobs for Africa (DJA) programme may serve as an important example of the role intermediation can play. The programme "touched the lives" of 153,172 youth in Egypt, Morocco, Ghana, Kenya, Nigeria and South Africa, aiming to create youth employment through ICT. The initiative provided youth with experiences in the labour market and with relevant qualifications, as well as training on how to apply for a job, and how to communicate professionally. The main barriers to youth employment in Africa the Foundation identified are:⁸⁹

- a lack of job experience;
- ► a lack of qualifications;
- a lack of capacity among youth jobseekers to distinguish themselves from the masses of jobseeking youth without the right qualifications and experience;
- a lack of knowledge among youth about employer requirements, and the frequent absence of feedback from unanswered or failed applications;
- > poor communication skills among disadvantaged youth;
- > a lack of tenacity and persistence, as disadvantaged youth easily become disheartened;
- the inaccessibility of training opportunities in rural and marginal areas where disadvantaged youth may live;
- child-caring responsibilities, especially among young women.

One of the main factors that distinguished those who succeeded from those who did not were "personality traits", including motivation and the willingness to take risks. In a similar vein, the ITC Refugee Employment and Skills Initiative (RESI) suggested in a meeting that one of the main difficulties in promoting online freelancing among refugees in Kenya has been to convince them that taking the associated risks is worth it; that taking a risk and investing time without initial profits over several weeks will eventually pay off. This indicates that the informality of the digital economy is accompanied by another long-standing feature of the economic lives of refugees: accepting risks as part of the bargain. In many cases, such risks include an expectation that one needs to undertake many hours of unpaid work in setting up profiles on platforms, bidding for clients and projects, and establishing a reputation. While this is true for the platform economy more generally, the often already high economic vulnerability of refugees makes this need for risk especially problematic.

Although direct interventions through skills training and mentorship can empower individuals to find work online, there has been some criticism of youth-focused initiatives along these lines. A recent report challenges the usefulness of focused interventions targeting youth for digital employment, arguing that the problem lies in a "missing jobs" crisis in the wider economy.⁹⁰ According to Phil Mader, one of the authors speaking at a webinar, "the problem is with the economy and missing jobs for everyone, and not with young people".⁹¹ The narrative that Africa's youthful population poses a demographic threat is sometimes over-stated, as are the expected returns from creating specific interventions that put youth into jobs. Upskilling alone will not change the fact that the labour markets are characterized by a high degree of informality. According to the report, "only broad-based economic development to create more demand for labour in the formal sector, combined with slower growth of the labour force, will change the pattern".⁹² The report further argues that another problematic assumption underlies many interventions – that training and skills will automatically lead to jobs. As long as the jobs are missing in the labour market, training alone will not contribute to increased employment in decent work. The widespread problem

⁸⁹ Genesis Analytics, Evaluation of Impact: The Rockefeller Foundation's Digital Jobs Africa Initiative, 2018, xii-xiv.

⁹⁰ Louise Fox et al., *Africa's Youth Employment' Crisis Is Actually a 'Missing Jobs' Crisis*, 2020.

⁹¹ Webinar, "Youth employment in Africa: critical issues for job creation", 30 March 2021.

⁹² Fox et al., Africa's 'Youth Employment' Crisis Is Actually a 'Missing Jobs' Crisis, 4.

in some African economies of unemployment among the highly educated underlines this. Another widespread assumption, the report argues, is that entrepreneurship facilitates economic leapfrogging. Yet, what is often framed as entrepreneurship may in reality be better described as self-employment and a means of survival, rather than some kind of upward progress on an economic evolutionary ladder.

In *Digital Entrepreneurship in Africa*, Friederici, Wahome and Graham show how this idea of leapfrogging across developmental stages draws its imaginary from both the ostensibly transformative force of the digital economy and entrepreneurship: "Digital technologies offer an imaginary within which there is a pathway for the African continent to overcome and overturn its historically peripheral global position and its history of colonial extraction, exploitation, and denigration".⁹³ The second unverified "gospel" is that entrepreneurship is a path towards alleviating youth underemployment. As both these "gospels" have become interlocked imaginaries, digital entrepreneurship is increasingly framed as a new pathway to modernity and prosperity.⁹⁴ The Digital Blueprint of Kenya mirrors these powerful hopes invested into the digital economy: "A digital economy offers Kenya a leapfrogging opportunity on economic development. Exploitation of opportunities that are inherent in disruptive technologies can see Kenya emerge from a low middle-income economy to an emerging markets/advanced economy." ⁹⁵

While acknowledging the powerful impact that these simplistic and optimistic narratives about youth job creation in digital economies have, it is equally important to examine the real opportunities alongside the challenges and critiques. The research behind this report found that specific interventions focusing on youth and refugee job creation in the digital economy are important enablers of economic inclusion, as are skills-training programmes, even if there is an urgent need to create more jobs and demand in the economy at large.

The gender dimension: digital livelihoods as a labour market solution for women?

It has often been stated that home-based online work might be especially relevant for women because it allows flexibility to balance work with domestic labour and caring responsibilities. With a frequent reference to social and cultural factors, home-based work in the online gig economy is widely seen as an attractive option for female refugees.⁹⁶ This positive evaluation highlights how the continuities between women's work in domestic and market economies become implicated in platform work, including the celebration of worker flexibility, as in combining taken-for-granted care work and housework with paid digital labour.⁹⁷ Moreover, location-based platforms have deepened gender-based occupational segregation, with publicfacing sectors such as taxis and deliveries being male-dominated, and on-demand domestic work services being predominantly female. On online web-based platforms, about four in ten workers are women, but in developing countries only about two in ten are female. Among competitive programmers on web-based platforms, only 1 out of 62 respondents of an ILO survey were female, reflecting a gender-based occupational segregation in the IT sector. On taxi and delivery platforms women comprise fewer than 10 per cent of workers.⁹⁸

⁹³ Nicolas Friederici, Michael Wahome, and Mark Graham, *Digital Entrepreneurship in Africa: How a Continent is Escaping Silicon Valley's Long Shadow* (Cambridge, MA: MIT Press, 2020), 6.

⁹⁴ Ibid., 12.

⁹⁵ Republic of Kenya, Digital Economy Blueprint: Powering Kenya's Transformation, 18.

⁹⁶ Abigail Hunt, Emma Samman, and Dina Mansour-Ille, Syrian Women Refugees in Jordan: Opportunity in the Gig Economy? (London: ODI, 2017).

⁹⁷ Melissa Gregg and Rutvica Andrijasevic, "Virtually Absent: The Gendered Histories and Economies of Digital Labour", in *Feminist Review* 123, 1 (1 November 2019): 1–7. https://doi.org/10.1177/0141778919878929.

⁹⁸ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 137.

The report *Digital Jobs for Youth: Young Women in the Digital Economy*⁶⁹ aims to provide operational recommendations for the design and implementation of gender-inclusive digital jobs interventions for youth. Global disparities in the labour force participation between women and men make women particularly important targets for upskilling and inclusion in the digital economy. This gender disparity in the labour market is replicated in the digital economy, as the global proportion of women using the Internet is around 12 per cent lower than that of men. Other aspects of a gendered digital divide are the prevalence of online harassment and violence targeting women, as well as social control of women's use of smartphones and the internet. Against this backdrop, there is a belief that jobs involving online work "offer flexibility that can help young women to overcome mobility constraints and combat restrictive gender norms".¹⁰⁰ Moreover, the report states: "Although concerns persist, digital jobs provide a means for young women to circumvent constraints to labour market participation arising from a lack of mobility or from social norms. The flexibility of digital work can also allow women to combine paid work with household or caregiver responsibilities."¹⁰¹

Digital livelihoods programmes often have a specific focus on women, not least because of their low labour market participation among many refugee populations. The overly optimistic adoption of digital labour for women with other responsibilities poses a danger of overburdening them with precarious work, while expecting them to balance online freelancing with household responsibilities. Indeed, huge disparities in unpaid care work between women and men also means that the promise of flexibility in online selfemployment is likely to contribute to precarity: women with care responsibilities are "more likely to be self-employed and to work in the informal economy, and less likely to contribute to social security".¹⁰² The benefits of the digital economy for women will be limited if effective social protection mechanisms are not in place, and new forms of digital work risk further pushing women towards precarious and gendernormative employment, while also leaving them without appropriate social protection and income security, such as maternity benefits, health coverage and sickness benefits. It is therefore important to acknowledge, that "it is not enough to simply create more jobs, there is a need to focus on improving women's access to good quality jobs".¹⁰³ Decent work for women, and indeed everyone else, goes beyond the basic quality of jobs and requires social protection mechanisms to prevent the further marginalization of women and vulnerable groups. In order to increase women's participation in the digital economy, new programmes must adequately address women's specific needs without putting them at risk.

⁹⁹ S4YE, Digital Jobs for Youth: Young Women in the Digital Economy (Washington, 2018).

¹⁰⁰ Ibid., 10.

¹⁰¹ Ibid., 12.

¹⁰² ILO, Care Work and Care Jobs for the Future of Decent Work (Geneva, 2018), xxxv.

¹⁰³ S4YE, Digital Jobs for Youth: Young Women in the Digital Economy, 10.

Background on the three case studies: refugees and host community youth in the (digital) labour market

Kenya

Based on those seeking work in the four weeks prior to data collection, Kenya had an official unemployment rate of 7.2 per cent by the end of 2020, with 17.6 per cent of people aged 20 to 24 having been unemployed. Counting both available and unavailable jobseekers, the rate stood at 15.6 per cent.¹⁰⁴ Only 22.5 per cent of the Kenyan population used the internet by 2020, compared with 57 per cent in Egypt and 24 per cent in Uganda.¹⁰⁵ With the use of mobile phones being widespread, the proliferation of mobile money in Kenya has been a particular catalyst for digital economic activity. Transactions via mobile money platforms are second only to cash payments in Kenya, opening up opportunities for Kenyans to sell their services to global marketplaces and receive payments from abroad.¹⁰⁶ Many digital labour platforms support the use of mobile money, including Uber, Lynk and Upwork.

From 2017 to 2018, the value of Kenya's ICT sector grew by 13 per cent to 390.2 billion shillings, driven by growth in the digital economy.¹⁰⁷ The Kenyan government invests much hope in the ability of the digital economy to help the country leapfrog towards an emerging market and advanced economy. The growth of mobile banking is often cited as one crucial enabler. At the heart of the hope that the digital economy has a transformative economic impact is a belief that "geography and place advantages disappear" as more economic activities take place online.¹⁰⁸ Referring to five "pillars" of the digital economy, Kenya's Blueprint identifies ubiquitous access to infrastructure, digital government, digital business, a thriving innovative and entrepreneurial ecosystem and a new set of digital economy skills and values as key factors in the way forward.

108 Ibid., 21.

¹⁰⁴ KNBS, Quarterly Labour Force Report: Quarter 3 July–September 2020 (Nairobi, 2020).

¹⁰⁵ https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=UG.

¹⁰⁶ Genesis Analytics and Mercy Corps, Towards a Digital Workforce: Understanding the Building Blocks of Kenya's Gig Economy (Nairobi, 2019), 29.

¹⁰⁷ Republic of Kenya, Digital Economy Blueprint: Powering Kenya's Transformation, 17.
These investments come on top of an already deepening inclusion of the labour force into digital economies. According to Ehud Gachugu, Project Director of the Ajira Digital Project, a survey in 2020 showed that there are some 607,000 young people actively participating in the digital economy in Kenya. "It tells you the size of that opportunity, and if it's well invested in, governed, and taken care of, it has the potential to significantly transform the lives of these young people", he added.

An interview with Catherine Getao, CEO of Kenya's ICT Authority, provided crucial insight into the development of ICT infrastructure and digital economies. According to Getao, "the starting point is infrastructure because if you don't have the networks, your use of ICT is very limited." Indeed, as Gachugu said: "We support access to infrastructure. As you are aware, in this country, there are numerous locations that cannot access devices or connectivity". Kenya therefore invests in submarine cables and a "national optic fibre backbone" inland of around 9,000 km, with estimates of it growing to 50,000 km over the next ten years, as of 2021. There have also been discussions around the current building of the fibre to the South Sudan border because it passes Kakuma refugee camp, yet Getao said that discussions with partners about how to connect refugees to this infrastructure have not been successful, "because most of them are just focused on capacity-building projects for refugees". As the fibre passes only a few kilometres from the camp, she indicated that this could connect Kakuma with the right donors and partners.

Building on this infrastructure, the government's Digital Literacy Programme (DLP) aims to ensure that people develop the capacities to make use of ICT infrastructure. This programme has focused on schoolchildren and aims to expand into secondary schools. At the university level, capacity-building is led by the ICT Ministry and the Ajira programme, alongside a digital talent programme that took on some 400 ICT interns who receive training to work in the public and private sector. Although Getao could not speak on government policies regarding the digital platform economy, referring to the mandate of the ICT Ministry, she defended the government's digital taxation efforts, underlining that paying tax on digital transactions is what good citizens do, while adding: "Building a foundation and maintaining infrastructure is very expensive for the government and therefore part of being a responsible citizen is being a taxpayer".

According to Gachugu, the 1.5 per cent digital sales tax is not intended to curtail the growth of digital platforms in Kenya. "I don't think that it has any implication on someone trying to charter a career around freelancing", he said, adding that the tax was primarily aimed at "companies that are significantly reaping huge profits out of the digital economy, but they don't support all the work that's going on, including the infrastructure development". Moreover, paying taxes on their digital transactions would ultimately give workers on digital labour platforms a stronger claim for adequate service delivery.

Refugees and the digital economy in Kenya

The majority of the approximately half a million refugees and asylum seekers in Kenya originate from Somalia (around 54 per cent). Other major nationalities are South Sudanese (24.6 per cent), Congolese (9 per cent), and Ethiopians (5.8 per cent). Refugees in Kenya primarily live in the Dadaab refugee complex and the Kakuma refugee camp, with about 196,050 registered refugees and asylum seekers in Kakuma and 217, 511 in Dadaab.¹⁰⁹ Another 81,024 refugees and asylum seekers reside in Nairobi and nearby urban areas.¹¹⁰ Since the early 1990s, the Kenyan government has restricted refugees' socio-economic freedom and limited their movement outside camps.¹¹¹ In Kakuma, 62 per cent of Congolese, 38 per cent of Somalis and 19 per cent of South Sudanese were engaged in economic activity by 2020. Refugees face a number of restrictions, such as the requirement to apply and pay for a Movement Pass in order to leave the camp, and they are not allowed to own livestock. Moreover, because of official legal restrictions,

¹⁰⁹ https://www.unhcr.org/ke/kakuma-refugee-camp.

¹¹⁰ UNHCR, Figures at a Glance: Kenya. https://www.unhcr.org/ke/figures-at-a-glance

¹¹¹ Alexander Betts, Naohiko Omata, and Olivier Sterck, Refugee Economies in Kenya (Oxford, 2020), 4.

refugee business owners or workers often face harassment or fines, and come under pressure to pay police bribes.¹¹² Most urban refugees and asylum seekers work in the informal sector as casual labourers, petty traders, small business owners and semi-skilled workers.¹¹³

According to the ILO,¹¹⁴ refugees in Kenya face a number of labour market integration challenges. The Kenya Citizenship and Immigration Act 2011 and Refugee Act 2006 support the right to work for refugees, in terms of contributing to the socio-economic growth of the country by allowing refugees to set up businesses and obtain work permits. But high unemployment, low economic growth and poverty levels in Kenya make work opportunities scarce.¹¹⁵ These rights also proved challenging to exercise because of the encampment policy that detrimentally impedes the ability of refugees to move and actually conduct business. Refugees also faced difficulties in obtaining legal documentation, which in turn makes it difficult to open bank accounts or profiles on digital labour platforms. The refugee certificate needed to apply for a work permit can take up to five years to be issued. This also has implications for access to financial services such as mobile money, because SIM cards needed for M-Pesa money transfers require a valid refugee documentation. Awareness and financial literacy of services such as PayPal and ATM cards are limited among refugees, many of whom are not familiar with or have no access to these services. While refugees could use their refugee attestation document to acquire a SIM card and enrol with M-Pesa in the past, this has recently become more restrictive, resulting in newly arrived refugees having to ask contacts and friends to register their IDs.

At the foundational level of the barriers stands the limited access to infrastructure and connectivity. Smartphone ownership among refugees is not very widespread, data costs can be high, and network signals are low. Yet even if internet connectivity is provided, unreliable electricity supplies, hardware access and unsuitable workspaces pose significant barriers to refugees' digital access in Kenya.¹¹⁶

One may say that despite these barriers, the overall restrictive context lends particular significance to digital livelihoods as a viable alternative, while at the same time limiting its promise as an easy solution for income creation and employment. The limitations also have to do with digital labour platforms identity verification requirements, and the absence of government regulation that would make refugee IDs universally acceptable and verifiable to meet KYC standards. As Gachugu put it in response to a question about refugees in the digital economy: "There are what you call authentication mechanisms if you are registering with the platform, so if you do not have nationally recognized credentials, how are we able to identify you and trust you with the client's work, and what if we cannot trace you and channel your payment once you are done executing a job? I always find that is quite a challenge for the refugee community, especially those who don't have authorized papers."

112 Ibid., 4.

¹¹³ https://www.unhcr.org/ke/livelihoods.

¹¹⁴ ILO, Youth Employment Opportunities in Kenya's Digital Economy.

¹¹⁵ Ibid., 10.

¹¹⁶ Ibid., 19-21.

Uganda

Based on those seeking work in the four weeks prior to data collection, Uganda had an official unemployment rate of 7.2 per cent by the end of 2020, with 17.6 per cent of people aged 20 to 24 having been unemployed. Counting both available and unavailable jobseekers, the rate stood at 15.6 per cent.¹¹⁷ Only 24 per cent of the Ugandan population used the internet by 2020, compared with 57 per cent in Egypt and 22.5 per cent in Kenya.¹¹⁸ The potentially inclusive character of the digital economy has become particularly promising in the wake of Uganda's economic crisis, especially since COVID-19 has impacted poor and vulnerable households severely.¹¹⁹

The Government of Uganda has committed the country to the Digital Uganda Vision (DUV), which is a strategic national policy framework that integrates and consolidates all existing ICT strategies, policies and plans into one overarching vision.¹²⁰ According to Julius Torachi, Commissioner at the Ugandan Ministry of ICT, the so-called Third National Development Plan (NDP III) identifies ICT "as one of the major components of transforming Uganda from a lower income to a middle-income country". The ambitious vision is somewhat limited by a number of constraining factors, such as a very low internet and penetration rate with a wide gap between rural and urban areas: only 9 per cent of Ugandans in rural areas have access to the internet, and about a third (30 per cent) of urban area dwellers.¹²¹ In consequence, "the preconditions for the digital take-off envisaged by the Digital Uganda Vision have not been met, with poor infrastructural development being the primary driver of low Internet use and mobile phone penetration in Uganda".¹²²

Torachi said that the government is currently investing in the national broadband infrastructure in order to connect all districts and cover border areas better. This infrastructure should also be used for promoting online work and includes an aim to make sure that both refugees and refugee-hosting communities will have access. A particular focus of growing digital capacity is youth. "Digital skills is one of the key pillars of our Digital Uganda Vision", said Torachi, adding that "digital employment, which the government is very keen on for providing employment for the youth, is one of the key areas being focused on by our president to make sure that young people are able to get employment online". Besides digital work, e-commerce is also a priority, and investments in this area include aims to strengthen online security and digital payment solutions.

The World Bank has highlighted the important job creation potential of the digital economy in Uganda, driven by growing mobile money penetration and the spread of accessible digital payment solutions. However, the underdeveloped internet infrastructure and a relatively low mobile use penetration cast doubt on the feasibility of digital economies to offer a wholesale solution for job creation. Indeed, only about 8 per cent of the population are mobile broadband subscribers. Uganda also negatively contributed to digital gaps and inequalities with taxation policies that inhibit Ugandans from taking up digital technologies, including a social media and mobile money tax.¹²³ A lack of basic and advanced digital skills in the population makes things worse, alongside the problem that some 90 per cent of households in

122 Ibid., 9.

¹¹⁷ KNBS, Quarterly Labour Force Report: Quarter 3 July–September 2020.

¹¹⁸ https://data.worldbank.org/indicator/IT.NET.USER.ZS?locations=UG.

¹¹⁹ World Bank, "Digital Solutions in a Time of Crisis." *Uganda Economic Update*, 15th Edition, 2020, vi. https://openknowledge. worldbank.org/handle/10986/34078.

¹²⁰ https://ict.go.ug/initiatives/digital-uganda-vision/.

¹²¹ Alison Gillwald et al., The State of ICT in Uganda.

¹²³ Ibid., 11.

Uganda do not have internet access.¹²⁴ Against this challenging backdrop, the World Bank nevertheless sees the more than 1 million refugees in Uganda as "a potential consumer segment for digital products and services and an underutilized source of talent that can support Uganda's digital economy".¹²⁵

Refugees and the digital economy in Uganda

With over a million refugees, Uganda is the third-largest refugee-hosting nation in the world and the largest in Africa. The country has generous policies towards displaced persons "and its legal and policy framework regarding refugees is considered one of the most progressive in the world".¹²⁶ Yet, just 29 per cent of refugees in Uganda are actively working, compared with 64 per cent among host communities. Refugees are 35 percentage points less likely than Ugandan nationals to be employed. Moreover, among youth (14 to 25 years), 50 per cent of refugee males and 41 per cent of females are unemployed, compared with 14 per cent of young Ugandan men and 16 per cent of young women.¹²⁷ Employment is often substandard and inadequate based on their skills levels. According to UNHCR, "Many refugees [in Uganda] accept employment that is below their skills level, education and pre-displacement occupation". This is especially so among those with higher levels of education, owing to a lack of recognition of qualifications and poor transferability of skills and professional experience.¹²⁸ This lack of recognition of pre-existing qualifications makes the digital economy particularly relevant, because it promises a more inclusive digital labour market that rewards skills and hard work more than conventional certifications.¹²⁹

The difficulties often lie at the very basic level of digital access, and even access to mobile phones has long been a challenge among refugees in Uganda. However, the Ugandan Government has recently decided to ease access to mobile-enabled services for refugees, and the Uganda Communications Commission (UCC) issued a directive to mobile network operators to recognize the OPM Refugee Family Attestation as a valid form of ID for refugees to obtain SIM cards.¹³⁰ A GSMA study on Bidi Bidi, the largest refugee settlement in Uganda, found that some 33 per cent of businesses there used mobile money services, and 60 per cent of mobile money agents reported an average monthly commission of between 100,000 and 300,000 Ugandan shillings (US\$27–81). Digital inclusion has also been driven forward by important mobile-based interventions, such as unconditional cash grants and e-vouchers for fresh food through mobile money, the provision of basic phones to persons with specific needs, and projects that deliver farm and crop management tools and financial services on digital channels.¹³¹

The Ugandan government sees refugees as a part in its aim to transform the country's digital infrastructures and digital economy. Torachi said that there is an aim to "make sure that all the refugees and refugee hosting communities have unlimited access to the internet and digital infrastructure, which will make them do all kinds of work and businesses online".

¹²⁴ World Bank, "Digital Solutions in a Time of Crisis". *Uganda Economic Update*, 15th Edition, ix.

¹²⁵ Ibid., 51-51.

¹²⁶ UNHCR, Uganda Policy Brief: Using Socio-economic Data to Promote Employment Solutions for Refugees in Uganda, 3.

¹²⁷ Ibid., 1.

¹²⁸ Ibid., 2.

¹²⁹ Philip Rushworth and Andreas Hackl, "Writing Code, Decoding Culture: Digital Skills and the Promise of a Fast Lane to Decent Work among Refugees and Migrants in Berlin".

¹³⁰ GSMA, The Digital Lives of Refugees: Lessons from Uganda. https://www.gsma.com/mobilefordevelopment/country/uganda/ the-digital-lives-of-refugees-lessons-from-uganda/.

¹³¹ Jenny Casswell, *The Digital Lives of Refugees: How Displaced Populations Use Mobile Phones and What Gets in the Way*, 2019, 15. https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/07/The-Digital-Lives-of-Refugees.pdf.



In the 1990s, Egypt began to develop a strategy for using ICT towards job creation and development, identifying ICT as a government priority and creating the Ministry of Communication and Information Technology (MCIT).¹³² Egypt has suffered from low education attainment, high population growth, and high barriers to market entry and associated challenges in adopting ICT.¹³³ Egypt's unemployment rate was around 10.4 per cent in 2020, but 25 per cent among youth.¹³⁴ MCIT has promoted initiatives such as "ICT for all" and others that promote the use of e-commerce in Egypt, to create jobs among youth and encourage SMEs to work in e-commerce and adopt digital technologies.¹³⁵ In 2016/2017, the Egyptian ICT sector has contributed 3.2 per cent of GDP, and the sector is believed to have provided between 90,000 to 95,000 jobs in the outsourcing industry alone.¹³⁶ The contribution of Egypt's digital economy to the GDP has increased to 4 per cent in 2019 compared with 3.5 per cent in 2018.¹³⁷

There are many government-led initiatives in digital skills, entrepreneurship, and youth employment in Egypt. Egypt's Vision 2030 aims to build a digital Egypt by "developing the ICT infrastructure, fostering digital inclusion, achieving the transition to a knowledge-based economy, building capacities and encouraging innovation, fighting corruption, ensuring cybersecurity, and promoting Egypt's position at the regional and international levels".¹³⁸

One of the largest initiatives launched by MCIT is TIEC, the Technology Innovation and Entrepreneurship Centre, which supports Egyptian entrepreneurs and start-ups. This runs under the umbrella of the Information Technology Industry Development Agency (ITIDA). The Digital Tomorrow initiative is co-run by MCIT and the Ministry of Youth and Sports under the "Tawar w Ghayar" initiative (Develop and Change), which "covers everything technology related", according to Mostafa Ezz El Arab, Director of the Youth Initiatives Fund at the Ministry of Youth and Sports. The initiative includes basic ICT skills training, as well as programming and other learning, covering all governorates. According to El Arab, "the objectives of all of these things is to support the digitalization of the workforce, to support youth in choosing their future careers, and to support youth in developing their skills". In parallel, the government has also launched a Digital Egypt project, which concentrates efforts of all state sectors to provide some 70 government services more easily to citizens with the help of digital technology.¹³⁹

New initiatives in the sphere of entrepreneurship coming out of government entities include Fekretak Sherketak ("Your Idea, Your Company"), a programme by the Egyptian General Authority for Investment and Free Zones (GAFI) under the Ministry of Investment and International Cooperation, financed by Egypt Ventures. Another programme is Rowad 2030 (Entrepreneurs 2030), undertaken by the Ministry of Planning, Monitoring and Administrative Reform, which focuses on educational and training opportunities in the innovation and entrepreneurship field. MCIT has also run the "Digital Egypt Builders Initiative", as well as the Future Work is Digital (FWD) initiative, targeting training and employment of youth in ICT.

135 Nagwa El Shenawi, Digital Economy ... How Are Developing Countries Performing? The Case of Egypt, 5.

¹³² Nagla Rizk and Kamel Sherif, ICT and Building a Knowledge-Based Society in Egypt, 3.

¹³³ Ibid., 8.

¹³⁴ https://data.worldbank.org/indicator/SL.UEM.1524.NE.ZS?locations=EG.

¹³⁶ Ibid., 6.

¹³⁷ https://www.trade.gov/country-commercial-guides/egypt-information-and-communications-technology-and-digitaleconomy.

¹³⁸ https://mcit.gov.eg/en/ICT_Strategy.

¹³⁹ https://mcit.gov.eg/en/Media_Center/Press_Room/Press_Releases/46832.

All this investment appears necessary because the Egyptian labour market is characterized by high youth unemployment, not least among university graduates. Moreover, Egypt has a large informal sector, including a variety of jobs from working as a street vendor to being self-employed in an unregistered enterprise. The informal sector "entails poor integration of technology, where jobs tend to be labour-intensive, and rely on simple tools and low skill levels, marking potential difficulties for youth who would later want to transition to other forms of work".¹⁴⁰

One example for how platforms have expanded this informal sector in digital ways is Uber. Uber has operated in Egypt since 2014, and in order to join the company, drivers must have a driving licence, a clear police record, pass a drug test, and have their car inspected. The typical profile of an Uber driver in Egypt is young, educated, married, and using Uber earnings to support three people or more.¹⁴¹

"In Egypt, the Uber model also offers a new form of work that can be taken up instead of, or along, mainstream employment, especially for Egypt's youth. It offers a sustainable and independent alternative to informal employment. With low barriers to entry, driver-partners are joining a new model with potential for self-development, guided by the rating system where they receive regular feedback."¹⁴²

Along with the spread of Uber and other location-based platforms, Egypt has witnessed a rapid inclusion of the young educated labour force into major digital labour platforms. Indeed, Egypt has one of the highest number of users on the four largest English digital labour platforms in the Middle East and North Africa region, followed closely by Tunisia.¹⁴³

The barriers to growth that some digital platforms face in Egypt are exemplified by Uber and its Arab subsidiary Careem. "Starting Careem in Egypt was extremely difficult because credit card penetration is extremely low in Egypt and cash was very risky", said Danya Bashir, a start-up expert for the MENA region who worked with Uber and Careem and contributed to their merger. Initially, infrastructural issues also hindered expansion, including a lack of accuracy of Google Maps. Major resistance also came from the traditional taxi sector in Egypt and especially in Cairo.

According to Mostafa Ezz El Arab, online freelancing is currently high up on the agenda of the Ministry: "This is something we are working on intensely lately: we are currently developing our national strategy for youth and part of this is about regulation. It's one of our main priorities to plan for and regularize youth's freelancing status." Surveys are currently in process to "assess the magnitude of the problem and potential solutions", including the enforcement of labour rights. He added that regularizing freelancing concerns all ministries and therefore will be a coordinated effort. This battle for regulation is not new. Egypt had at some point banned Uber and Careem ride-hailing apps, which decision was lifted by a court, with an agreement for them to pay VAT.¹⁴⁴

¹⁴⁰ Nagla Rizk, A Glimpse into the Sharing Economy: An Analysis of Uber Driver-Partners in Egypt, 2017, 6–7.

¹⁴¹ Ibid., 9.

¹⁴² Ibid., 20.

¹⁴³ Otto Kässi and Vili Lehdonvirta, "Online Labour Index: Measuring the Online Gig Economy for Policy and Research", in *Technological Forecasting and Social Change* 137 (2018): 241–48. https://doi.org/https://doi.org/10.1016/j. techfore.2018.07.056.

¹⁴⁴ https://www.reuters.com/article/us-uber-egypt-idUSKCN1QC0DN.

One of the reasonings behind leveraging the digital economy for youth employment is related to traditionally marginalized areas of the country, such as Upper Egypt and the Delta, where "intellectual and education levels are actually really high, but the problem is the demand and access to opportunities", said El Arab. Here the inclusive promise of a digital economy that transcends geographical boundaries is seen as a key tool to bring income and employment opportunities to remote regions. Beneficiaries of digital skills initiatives in Egypt often speak highly of the government's efforts in connecting youth to the digital economy. Mohamed Saleh, who took part in the Future of Work is Digital initiative and now works as a moderator in its data science programme, said that the government has become "extremely supportive". He added:

"The government acknowledges the freelancing market's powerful role in supporting youth development. The value of digital freelancing and freelancing platforms is that it alleviates problems of youth unemployment – because in addition to the gigs and opportunities to be found in Egypt, the youth can also work for projects abroad, all the while staying in Egypt. So, it's a way of exporting Egyptian talent, all the while allowing for the national economy to reap the benefits of this."

Refugees and the digital economy in Egypt

UNHCR in Egypt registered 254,726 refugees and asylum-seekers from 58 nationalities by 2019, and Syrian refugees remain the largest population among them. Refugees and asylum seekers registered with UNHCR can regularize their residency and usually get six-month renewable residence permits, although the process of renewing them has been lengthy and difficult. Syrian refugees mostly reside in urban areas such as Greater Cairo, Alexandria and Damietta, and an estimated 67 per cent are extremely poor and in need of assistance. Administrative barriers that limit access to work permits have caused refugee households to resort to informal employment that can sometimes be unsafe and exploitative.¹⁴⁵

According to the ILO: "The situation of refugees and asylum seekers in Egypt is further affected by difficult socio-economic conditions, including dramatic price rises and inflation, scarce employment opportunities, negative perceptions of certain nationalities and a general deterioration of the security environment due to political instability."¹⁴⁶ Amid the challenges among refugees to find employment, and the rapid growth of the digital economies in Egypt, work on online digital labour platforms and other digital work appear to be promising new forms of accessible work with low barriers to entry.

According to our interview with the Ministry of Youth and Sports, refugees are on the agenda of the governments' efforts in digital upskilling and in including youth in the digital economy. "Generally, there's a huge will to include refugees in government programmes", said El Arab.

^{145 3}RP, Regional Refugee and Resilience Plan in Response to the Syria Crisis 2020/2021: Egypt.

¹⁴⁶ ILO and UNHCR, Market Systems Analysis: Egypt: Market Systems Analysis for Syrian Refugees in Egypt, 2018, 5.

The digital economy among refugees and youth: discussion of individual platforms

The digital platforms we analysed with respect to their relevance for disadvantaged youth and refugees in Kenya, Uganda and Egypt fall broadly into the following categories.

- 1. **Web-based digital labour platforms**, including general freelancing platforms and specialized platforms.
- 2. **On-demand location-based platforms**, including delivery, ride-hailing and other on-demand services or work.
- 3. **Social impact platforms**, such as social enterprises or impact-oriented web-based platforms with a specific mission aim that wants to drive social impact.
- 4. E-commerce platforms, such as online marketplaces for trading goods.
- 5. Job-matching and recruitment platforms.

The mapping and research process identified platforms for closer analysis with regard to their relevance and accessibility for refugees. This qualitative analysis of selected representative platforms for different types focuses on their accessibility and inclusivity for youth and refugees, and the overall working conditions as well as certain indicators of appropriate work. These indicators build on Fair Work principles as defined by the Fair Work Foundation (fair pay, fair conditions, fair contracts, fair management, fair representation),¹⁴⁷ while also taking into account the specific needs of refugees alongside the general principles for youth employment. The discussions of individual platforms, which are based on interviews and desk-based research, are broadly based on the following indicators.

^{147 &}quot;Principles", Fair Work Foundation, https://fair.work/en/fw/principles/.

Accessibility and preconditions

- ▶ What are the identification and registration requirements on the platform?
- > What financial requirements do transactions on the platform have?
- ▶ Is there a vetting and competitive onboarding process?
- ▶ What are the skills and language requirements?
- ▶ What hardware and connectivity preconditions are needed?
- Does the platform charge workers subscription fees and any other hidden costs?

Working conditions

- ▶ What is the work experience for workers on the platform?
- What is the level of pay?
- What is the required time investment, including both unpaid labour and paid labour time?
- Does the platform charge a commission fee on workers' earnings?

Payment mechanisms

Are alternative modes of payment outside of bank accounts and credit cards, which many refugees do not have, available to workers?

Level of competition

▶ Is the level of competition likely to be very high on the platform?

Level of support

What support does the platform offer for workers, including training opportunities, mentoring, and guidance?

Sustainability and transferability

Does the type of work provided by the platform advance career progression and build transferable skills?

While the research aimed to gather consistent information across all interviewed platforms, the inevitability of certain gaps sets limits for a comprehensive comparative analysis. The report therefore prioritizes qualitative analysis of the types and categories of platforms from the perspective of refugees in particular, and youth more generally.

General insight on digital labour platforms

The ILO's 2021 World Employment and Social Outlook (WESO) offers a comprehensive overview of the role of digital labour platforms in today's economy, while offering insight about the major types of platform and their business models. Digital platforms have penetrated almost every sector of the economy, reorganizing markets and work arrangements, affecting competition and challenging regulatory models. Of particular relevance for the present discussion are digital labour platforms, which comprise online web-based platforms in many areas of work, including microtasking and general freelancing, as well as specialized freelancing platforms in fields such as medical consultation or translation. Moreover, location-based labour platforms include on-demand services such as ride-hailing, delivery, home services, domestic work and care services. The WESO report identified three main features in the business models of digital

labour platforms: 1) algorithmic management of work processes and performance, such as metrics that rate freelancers; 2) organization of work in ways that allow platforms to provide services without having to invest in capital equipment, such as computers or vehicles, and without bearing the operational costs; 3) a segmented dual labour market consisting of a small labour force directly employed by the platform and a large outsourced workforce whose work is mediated by the platform.¹⁴⁸

Building on these business models, online web-based platforms come in various types, including freelance platforms that function as a marketplace where workers bid for jobs posted by clients. Some freelance platforms specialize in particular fields, such as translation, or they actively match workers with jobs rather than letting them do the bidding. Microtasking platforms are also web-based and can be accessed from anywhere, although they differ from general freelancing platforms in that they feature small tasks that are disaggregated into segments and dispersed to an anonymous "crowd" of taskers or microworkers. Location-based platforms centre mostly around taxi and delivery services, although they also include other services such as domestic work.¹⁴⁹

Despite the diversity of services and platforms, the WESO report identifies some common elements and practices in the business model across the different types of platforms; price-setting and remuneration-setting mechanisms, charging of commission fees to workers and clients, matching of workers with clients, allocation and evaluation of work through algorithms, monitoring of work and workers using digital tools, and the use of rating systems and terms of services that govern the worker-platform relationship.¹⁵⁰ All this is connected to the revenue and pricing models of platforms that are designed to bind clients and workers to the platform. Pricing strategies are designed to appeal to clients or customers, and to workers, although workers are often charged subscription fees and lose part of their income to commission. Overall, the commission fees charged by web-based labour platforms to workers are higher than those charged to clients. In addition to subscription fees, platforms such as Upwork have introduced forms of internal digital currency, called Connects, which workers must purchase to bid for jobs if they use more than what is included in their subscription. As we will see in the discussion below, such subscription fees are not only key to the revenue of platforms: they effectively entrench the risk and exclusion of marginalized populations from succeeding on the platform. Having to pay for these fees can be difficult for those living in low-income countries who have not yet built up a major reputation as workers in their field.

The WESO report offers a comprehensive overview of the many challenges that workers face on digital labour platforms.¹⁵¹ One of these challenges results from the classification of the contractual relationship between the platform and the worker as other than employment, meaning that platform workers cannot access many of the workplace protections and entitlements that apply to employees. Indeed, the majority of platform workers do not have social security coverage. Moreover, the algorithmic management that matches workers with clients limits the ability of workers to reject work, often for fear of negative ratings. The platforms' classification of workers as self-employed further undermines their collective bargaining power, although some workers in specific regions have begun to organize and form cooperatives. Other challenges faced by workers on digital labour platforms include discrimination, harassment and exposure to particular risks during the COVID-19 pandemic.

Another different category of web-based platforms are job-matching, recruitment, and careers platforms that do not manage work processes but nonetheless match workers with employers and clients. These range from basic job search websites that offer users the tools for career development, to talent recruitment platforms that have a pool of often highly skilled workers registered in their platform and actively match clients with the most suitable candidates, who then go through a competitive hiring process. These platforms tend to be profit-oriented and serve employers more than workers.

¹⁴⁸ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 73.

¹⁴⁹ Ibid., 74-75.

¹⁵⁰ Ibid., 77.

¹⁵¹ Ibid., 24–25.

Ideologically positioned against the profit-oriented business model of web-based platforms, a new generation of social impact platforms, social enterprises and intermediary organizations follow a different overall approach, although in the final analysis, the working conditions they create largely mirror the same indecent working conditions that define the platform economy at large. Social impact platforms include outsourcing and online work initiatives or companies that have a dedicated aim of including disadvantaged populations, such as unemployed youth in rural areas, migrants or refugees. Some social impact platforms tend to operate on a smaller scale, with the number of workers usually not surpassing a few hundred. This enables a more human-centred approach, decreases the need for automated algorithmic management, and offers opportunities for direct support. Many of these platforms create a protected and incubated sub-market that is shielded from the global competition, in part by bidding for projects and clients on behalf of workers as a kind of agency, and then distributing work fairly among them and preparing them for individual jobs and assignments.

However, these social enterprises and social impact platforms largely fail to depart from the overall indecent conditions that characterize platform work. In contravention of the ILO's Private Employment Agencies Convention, which stipulates that "private employment agencies shall not charge directly or indirectly, in whole or in part, any fees or costs to workers",¹⁵² many of these social impact platforms take a substantial cut from the income that workers generate. They justify this as necessary to ensure the sustainability of their business and ongoing support for workers, but this effectively means that refugees and other workers fund part of the business through their labour and bear the indirect cost for the low prices set by clients in the digital global marketplace. The business thereby acts as a private agency in the sense that it matches workers with clients.

Digital labour platforms have penetrated almost every sector of the economy. Web-based freelancing platforms in particular often feature a large variety of skill sets and specializations. Platform work among refugees and other marginalized populations has been especially successful when it builds on their pre-existing skills. The success of Somali freelance translators who work on Upwork or ProZ from Kenya is one example. Other low-skill work that has become particularly prominent in the social impact and development sector is image annotation, exemplified by platforms and social enterprises such as Refunite's LevelApp and Humans in the Loop. Data entry tasks have also been used to generate income among low-skilled workers. One of the problems with location-based on-demand platforms in ride-hailing and delivery, from a development perspective, is that they are often inadequate for refugees, migrants and youth in rural or marginalized areas, despite their low skill requirements. They are concentrated in urban areas and often have strict vetting and verification requirements, while also requiring a car or a motorbike and the licences to drive them.

Online web-based platforms

Web-based labour platforms have been at the centre of efforts to leverage the inclusive potential of the digital economy for income generation among youth and refugees. This is because they allow work to be carried out from home and are often easily accessible with only minimum requirements to sign up. Yet, refugees often lack the ability to fulfil these minimum requirements, which can include ID verification and specific payment mechanisms. This is less of a problem where mobile money – which is supported by many platforms – is widely available, as in Kenya and Uganda. It becomes a problem in countries such as Egypt or Lebanon, where mobile money is still in its infancy, and bank accounts are not easily accessible for refugees. Therefore, even outside the skills requirements of successful online freelancing work, refugees face significant obstacles in their basic access to the digital economy.

The feasible path forward is often that UN agencies and other organizations negotiate either with work platforms or with host government authorities, so that refugee ID cards are accepted for identity verification on platforms and with banks. In Kenya, Upwork agreed with ITC and NRC to accept the alien ID card for the verification of refugee workers' IDs. And in Egypt, WFP and UNHCR negotiated with the

¹⁵² C181 – Private Employment Agencies Convention, 1997 (No. 181), Article 7, https://www.ilo.org/dyn/normlex/en/f?p=NORML EXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312326.

government to accept the refugee registration card as sufficient for financial services providers.¹⁵³ Yet even if interventions such as these are successful, international sanctions against financial transactions with certain nationalities, such as Syrians, can mean that entire refugee populations are prevented from opening bank accounts or from accessing digital labour platforms. And even if an individual platform agrees to make an exception for refugees, the financial infrastructure that governs business on platforms, be it PayPal or another provider, are often legally bound to follow sanctions and take KYC requirements very seriously. Upwork, for example, routinely asks workers to verify their identities, in part to comply with laws that require them to determine who owns an account, such as the US government KYC compliance programme.

Interviews with platforms and refugee users in Kenya, Uganda and Egypt revealed a wide range of additional obstacles and difficulties in accessing and working through web-based labour platforms, alongside evidence that web-based labour platforms can become important sources of income for those who succeed.

Global web-based freelancing platforms

While a review of major global platforms would go beyond the scope of this research, some are discussed here in order to provide a few prominent examples and engender discussion. Upwork is one of the world's largest and most well-known web-based freelancing platforms. It offers a wide variety of services provided by individual workers and freelancing agencies to clients. Upwork's revenue increased from US\$164 million in 2016 to US\$301 million in 2019. Although interviews with Upwork staff revealed a strong interest in reaching out to refugees and marginalized youth in Africa, our research made clear that accessing major web-based platforms and succeeding on them remains a challenge for many.

In terms of accessibility, Upwork charges workers subscription fees that restrict access for people from marginalized and disadvantaged backgrounds. Upwork charges workers 5 to 20 per cent based on the amount earned with a particular client. Since 2019, new paid memberships for clients were introduced, and workers are required to purchase Connects to bid for projects, once they have used up their free Connects.¹⁵⁴ Upwork generated 62 per cent of its 2019 revenue from fees charged to workers, while 38 per cent was generated through fees charged to clients.¹⁵⁵ Upwork used to vet new workers with a skills test as a basic requirement for opening an account, but this was discontinued in 2019. Moreover, Upwork generally requires a verifiable ID to open a profile, such as a national ID, but it has selectively cooperated with international organizations towards accepting refugee ID cards, for example in Kenya. It is unlikely that this elective approach is scalable, however. Many larger freelancing platforms such as Upwork also exclude certain nationalities from opening a profile owing to international sanctions, Syria being one of those frequently excluded.

Despite these obstacles, Upwork is unique in the way it partnered with the Refugee Employment and Skills Initiative (RESI) of the International Trade Center (ITC), and the Norwegian Refugee Council (NRC), to bring digital opportunities to refugees and their host communities in Kenya and Jordan. In Kenya, some 140 refugees living in Dadaab and Kakuma were trained in online freelancing and received mentorship, while being provided sample projects to complete after the training. Successful trainees would then be assisted to set up profiles on Upwork where they started to bid for gigs. Although Upwork accepted alien IDs for registration, delays in renewing these IDs and other bureaucratic challenges often resulted in accounts

¹⁵³ UNHCR and Social Performance Task Force, Serving Refugee Populations: The Next Financial Inclusion Frontier, 2016.

¹⁵⁴ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 79.155 Ibid., 20.

being suspended. The main areas in which the refugee freelancers worked are Somali–English translation, transcription and data entry, with varying levels of income and different frequencies of work depending on the individual worker.

The **Dadaab Collective Freelancing Agency**, which came out of RESI, is an example of how the *agency model* can help mediate between freelancing platforms and disadvantaged groups. According to Liz Vickers, who has worked with the Dadaab Freelancing Agency on behalf of Upwork, a good freelancing agency does much more than being the front face of the workers: "You are finding work for them, you are submitting proposals on behalf of freelancers, you make sure they are capable of completing the work. As a freelancer on Upwork you look for work, you need money for Connects, but if you have an agency in place, they can handle all those things for you." The Dadaab Agency charges workers who do projects through it a commission of 10 per cent of their earnings, which is used to support the administration and running costs of the agency. This way the agency is fully self-reliant, although it is occasionally supported by RESI. While this commission is used to ensure the sustainability of the agency, charging workers commission fees nonetheless contravenes the ILO Private Employment Agencies Convention.

The fees imposed by platforms such as Upwork on workers poses a significant challenge for refugees with limited financial resources, especially since bidding for work involves many hours of unpaid labour time with uncertainty over future returns. From the perspective of using major digital labour platforms such as Upwork in future interventions to support job creation among youth and refugees, it appears that forming agencies and other intermediaries that are supported by funding and staff would be one way forward. This mitigates some of the risk of new workers investing days of their time in bidding without much success, and such an agency can provide direct support and skills training.

Apart from general web-based platforms, a range of specialized freelancing platforms appeared to be particularly suitable for certain refugee populations who had pre-existing skills in areas such as language teaching or translation. The platform ProZ has been especially well-regarded by refugees in Kenya.

▶ In focus: **ProZ**

ProZ.com is a platform and online registry for freelance translators with a vibrant community of around 20,000 paying members and over a million registered users. The platform is widely used among Somali refugees in Kenya, owing to a particular demand for Somali language translators in the market. Alongside ProZ.com, which allows clients to search and approach freelancers with work offers, the company collaborates with the remote translation software platforms Boostlingo and Total Language. Here selected interpreters working with ProZ are connected to clients in the United States and the United Kingdom, such as hospitals in need of remote translation services. With the COVID-19 pandemic, this line of work recently experienced a growth of around 300 per cent, according to Enrique Manzo, who oversees the remote interpreter operations at ProZ.

The founder and CEO, Henry Dotterer, sees ProZ to be "different from everyone else in the language industry, and from Upwork-style marketplaces". This difference is rooted in the absence of any commission charged on the platform. "Our model is to work for the translator, not the client. We are freelancer friendly", said Dotterer, adding that the only cost is a yearly subscription fee of US\$120 or US\$180. There is no bidding as such on the platform, and pricing is worked out directly between clients and translators in e-mail conversation outside the platform. The absence of commission fees sets ProZ apart from many competitors and offers an opportunity for freelancers from challenging socio-economic backgrounds, although the subscription fee can be a burden, too.

Accessibility

The accessibility is different between ProZ.com and its remote interpretation services. As an online platform for freelance translators, ProZ is accessible to anyone who wants to create a profile. In terms of payment mechanisms, ProZ has a dedicated payments department that continuously works on solutions for workers. Payment is usually facilitated outside the platform, and the modes of transaction are agreed between worker and client, but the platform also offers a "ProZ Pay" option, whereby

payments can be channelled through the platform in any way suitable for the worker, including Payoneer, bank transfer and PayPal. Freelancers can also request an advance payment. However, translators in certain countries that are subject to US-sanctions, including Syria and Lebanon, cannot use this service, which effectively excludes many refugees and migrants from these countries as well.

Accessibility is more restrictive and competitive when it comes to the remote interpreter work that operates through Boostlingo and Total Language. An identity verification programme usually requires a credit card or official ID, and there can be additional background checks of the interpreter pool if a client requires it. However, they have made exceptions with refugees, according to Manzo: "With refugees, we do a Skype call, look at credentials (degrees, or recommendation letters), and we have a native language verification programme to check they are natives in the language they say they are".

Work process and income

Average earnings for remote interpreters are around US\$250 a month, but as Manzo points out, this is not a useful figure since some only work a few times while others work almost every day. The median earnings are around US\$500, and top earners make between US\$2,000 and US\$2,500 per month for remote translation. The ideal process for freelancers working with ProZ is as follows: a linguist creates a profile and then gets their first clients, who leave feedback. Members would then realize the benefits of the website and sign up for a yearly membership, which, together with rankings, pushes their profile further up on the website. The worker can then apply for one of the pools of specialized cohorts of ProZ linguists, from which companies can recruit workers for larger projects. Access to pools is subject to a screening process. With some of the refugees working with them, the process also worked the other way around, said Manzo, explaining that they often hear about the translations service and apply to work as a remote interpreter. Soon after that, they would often realize the benefits of ProZ membership and join its network as paying members.

Support

ProZ.com has a vibrant forum community with threads about almost any topic of relevance to their work. The community dimension of ProZ is intended to address the loneliness many freelancers can feel working from home, while also offering a knowledge pool on important questions of translation work. Together with this peer element in support, there is a mentorship programme. Experienced freelancers can apply to become mentors and would then be allocated a set number of mentees.

Sustainability and transferability

It is possible for successful linguists on ProZ to create their own business and then apply to become an agency. Although "only a minority of people incorporate into an agency or company", according to Manzo, these business members gain access to the ProZ pools and can source work directly from them. ProZ does not restrict workers to their platform in any way and they are free to use their profile to obtain work elsewhere.

Recruitment and talent-matching platforms

For highly skilled professionals, such as university graduates and experts in various fields, recruitment platforms can be a better alternative to freelancing for global marketplaces such as Upwork or Fiverr. One recruitment platform that we interviewed is Shortlist, which defines itself as a talent-matching and employability platform that helps to connect skilled professionals to careers across Africa and India. The platform provides executives with search services for senior hires across commercial and tech roles, as well as providing recruitment technology that powers mass recruitment drives and automates recruiting and candidate engagement and screening processes of hiring. Launched in 2016, Shortlist has worked with almost 800 companies and engaged over a million young professionals, including placing over 1500, according to the Chief of Staff, Ceverene Mureithi. The focus on highly skilled "talent" already suggests that these kinds of platforms are not easily accessible and therefore not a likely solution for job creation among marginalized youth and refugees. However, they do provide an alternative for those who are university educated or have other professional specializations that are sought after.

In terms of basic accessibility, Shortlist is easy to join: in order to create a profile, jobseekers only need an e-mail address and a phone number as unique identifiers, with no initial requirement for IDs or passports to get set up, according to Mureithi. Registered users can then browse through listed jobs and apply for positions, as long as they have their profile set up. However, the vetting process is skill-based, and candidates who apply for positions are screened for the basic requirements of the job in question. "We do competency-based and structured interviews for us to fully vet and understand a person's background skills and experience and how that matches a particular position", Mureithi explained.

Shortlist does actively encourage people from disadvantaged backgrounds to apply for jobs and is conscious of maintaining a gender balance. As Mureithi puts it: "We are very cognizant of the biases and the marginalization of some of the people who would be engaging with us". She did admit that there is a concentration of male junior white-collar workers, the reason why they have taken some steps to outreach in marginalized communities, such as the Borana community in Kenya. In terms of language requirements, the platform operates in English; "98 per cent of the jobs we run are in English", said Mureithi, adding that there are some roles in Hindi or French, but these are very selective and not the norm.

The recruitment and talent-matching model of Shortlist is focused on servicing employers rather than applicants, which is why they offer a lot of support to employers in terms of giving them interviewing and onboarding tips. Although they do offer insight from candidates as well, they have "monetized" this, alongside a range of blog posts and newsletters for candidates. As a hiring platform that caters to the highly skilled, Shortlist certainly offers opportunities for employment that lead to careers and social mobility. As Mureithi said: "Our clients are mostly tech start-ups, so they are fast paced and growing very fast. This allows the candidates on the database, once employed by one of our clients, to go into an environment that allows growth."

Country-specific web-based freelancing platforms

Amid the rise of major global platforms, there is an opportunity to achieve more by reducing scale and catering to nationally specific labour markets, clients and workers. This section offers two examples for such country-specific platforms, which tend to be more supportive and inclusive than global platforms and offer a more direct relationship between employees of the platform and freelance workers. Moreover, some of these platforms were created by former freelancers who are from the country of operation and have experienced the challenges of the digital economy themselves. This background often contributes to the supportive and inclusive outlook of these businesses.

In focus: Kazi Remote (Kenya)

Kazi Remote is a business that offers services in transcription, captioning, English subtitles and content writing, sourced from Kenyan workers. It was founded by Frida Mwangi, who used to work as a highly successful freelancer on Upwork after having been a stay-at-home mother for about 20 years. Her Upwork profile became so popular that she soon struggled to handle all requests and decided to outsource some of the work to others. She founded Kazi Remote to institutionalize this outsourcing, reaching a database of 200 online workers by 2021. Of the 37 active workers who worked on projects in April 2021, 20 are women and 17 are men, indicating a good gender balance and a dedication to supporting young women. Aspiring workers can apply for a dedicated training programme.

Kazi Remote sets itself apart from digital labour platforms that ask individual workers to constantly bid for gigs. Instead, Kazi Remote operates in a similar way to an online freelancing agency: it brings in projects and then distributes the tasks among a selected pool of trained workers. Once a client agrees to outsource a project of work to Kazi Remote, tasks are split up among workers in an internal platform.

Accessibility

In theory, anyone who has finished high school, understands English, can follow instructions and complete a training can join Kazi Remote. At the same time, the application process is rather competitive and passes through various stages of vetting and screening. Mwangi explains the process as follows: they issue a call for application, and applicants must fill in a form, take a photo of their ID and one of their workspace. Working from a computer lab or hub is possible. "We need to know if you own a computer, or have access to one", said Mwangi, adding that they also check whether applicants have Wi-Fi. "If you say that you have Wi-Fi, we send a link on the phone that allows you to do a speed test. We also test the strength of the computer." When inviting applications for transcribers and other specialized skills, Kazi Remote also wants to see some online presence on Upwork or elsewhere, asking applicants to show that they know what they are doing. "So we do that, then we vet them and have shortlisted candidates. They have to do an interview online, where they have grammar tests while someone is watching, and then they get a three-minute transcription test", said Mwangi.

A second route into Kazi Remote runs through its apprenticeship and training programme. Here the main question asked for interested participants is their motivation. In classes of 25, participants then learn about online freelancing in the fields where Kazi Remote is active, while also getting hands-on practice on projects. Successful graduates are added to a database from which Kazi Remote can source additional workers if there is "excessive work" that cannot be done by the smaller circle of core workers.

As for refugees, Mwangi said that they were interested in hiring refugees, but that their efforts to expand into camps has recently been upset by the government's intention to close camps. "So we stopped and do not know what the situation will be. But being a remote platform makes it very easy – as long as someone has a computer and internet, regardless of where they are, they can work", she said.

Work process and income

A good transcriber working on a 60-minute interview will take about six hours of intensive work, but Kazi Remote considers an hour of interview transcription to equal a full day. For data privacy reasons, most interviews are split up into shorter 10-minute pieces so that each worker does not have access to the entire data. According to Mwangi, a Kenyan worker who does an hour of recording every workday could take home between 25,000 and 35,000 shillings a month (between US\$233 and US\$326). The internal platform allocates the work on a daily basis, whereby workers set their availability for the next day and then receive work. These relatively good earnings are well above the minimum wage in Kenya (around US\$150 a month), despite the fact that workers at Kazi Remote only receive 33 per cent of the amount charged to clients, while the rest is used for expenses and salaries of the core personnel.

The share that goes back into the business is around 25 per cent. According to Mwangi, the share that goes into running costs and business profits is needed to facilitate the sustainable running of the company when the supply of work is inconsistent.

In focus: Ureed (Egypt)

Ureed is a relatively new web-based freelancing platform that operates in Arabic and English that started in 2020, with a focus on Egypt and the Middle East region. Initially launched as a marketplace for translators and writers, it has since expanded the categories of its services to include a variety of skill sets and fields of work. Ureed had some 65,000 registered workers in early 2021. In addition to its Middle East focus, the platform sets itself apart from competitors with a focus on acquiring larger projects from private and public sector clients that are then redistributed internally and outsourced to workers whose profiles match the clients' demands. According to Marwan Abdelaziz, the CEO, "freelancing as a whole focuses on low volume transactions and low skill. What we do, we work with private and public sector clients creating directly jobs for the workforce."

Accessibility

Ureed offers a degree of flexibility when it comes to payment options for workers, who can use bank transfers, mobile wallets or currency exchange services to cash money. The platform is generally accessible to anyone who provides an accurate profile and has relevant skills. However, the hiring process for larger enterprise-related opportunities is more competitive, with a vetting process that includes tests on specific skills demanded by the client and interviews for more complex and technical assignments. Other limitations to accessibility are governed by US sanctions. As Abdelaziz explained: "You are not allowed to get paid in US\$ or use American [financial] infrastructures if you are from a certain country, like Syria. Some can still use exchange services like Western Union. For Lebanon and Jordan, we can do currency exchange services. It comes with an additional fee."

As for refugees, Ureed has recently started establishing a collaboration with the UNHCR to identify interested female refugee candidates with a higher education degree related to language, communication, linguistics and software engineering. The aim is to include up to 1,000 female workers from Jordan and Lebanon. However, as Elvira Van Daele, the SME and Value Chain Solutions Regional Manager at the International Finance Corporation (IFC), who worked with Ureed on the women's freelancing training programme, said: "The idea has always been to include refugees, when and where possible, but there are a lot of barriers". Together with the need to have the right technical skills set and higher education, "there are a lot of regulatory, socio-cultural, technical and financial restrictions". She added that it is not officially allowed for refugees in Lebanon to engage in digital work, while in Jordan there are prohibitions on refugees working in certain professions.

Work process and commission

When Ureed sources high-volume projects from enterprises, the right talent is selected based on their expertise. The platform itself suggests to workers how they should price their services based on their profile. All transactions are charged a commission fee of 20 per cent by Ureed, although they have recently introduced a sliding fee policy that allows workers to drop their rate to 10 per cent if they make over US\$1,000 per month. The commission fee is primarily used to maintain the platform and systems and to cover expenses for support, as well as legal and finance expenses and staff costs, according to Abdelaziz.

Transferability

Ureed also aims to support its workers in leveraging their successful work on the platform in their work elsewhere. The platform encourages them to "use their profile as their own CV", according to Abdelaziz. "We are also rolling out reputation and recommendations at the moment. Reputation can be linked to social media accounts and to Stack Overflow. It becomes a one-stop shop for your CV, which you can use to promote your work elsewhere too."

Training and support

In partnership with the IFC and the Dutch Government, Ureed offers a self-paced online training programme in freelancing to women in Jordan and Lebanon. The training, titled "Mastering the World of Online Freelancing", includes three core courses and two optional courses. The core courses are: "Boosting your professional online presence", "Successfully competing as an online freelancer", and "Managing an effective client-freelancer relationship". The two optional courses are "Mastering computer-assisted translation tools" and "Content writing that sticks". Each of the courses takes between 1.5 and 2.5 hours to complete. According to Abdelaziz, the programme targets "women in the region who already had some technical skills, such as translators, writers or designers, and they want to learn what it means to be a freelancer".

Once participants have completed the training and set up their profiles, they are supported in finding their first work opportunities. The platform offers clients discounts on the fees they pay the worker in order to encourage them to employ the newcomers, which allows the training graduates to obtain a first positive evaluation that will support their independent work in the future. Moreover, Ureed has partnered with Coursera to offer skills training for participants who lack some skills. The plan is to use World Bank funding to support potential students and workers to be onboarded on Ureed, even if they do not yet have the technical skills.

Inploy (Egypt)

Inploy is a web-based freelancing platform in Egypt with about 3,000 registered workers and some 700 clients at the time of writing. The founder, Jad Ghalayini, worked as a freelancer before creating the platform for Egypt's market. Aiming to distinguish itself from some of the larger global platforms where workers from low-income countries push down prices, Ghalayini started Inploy primarily to elevate "Egyptian talent". Although the platform was restructuring at the time of research, Ghalayini said it would soon re-launch as a subscription-based platform with individual worker profiles and job postings from clients. This process of restructuring appeared to be under way at the time of writing.

Accessibility

Once the new platform is active, new profiles will be subject to AI-supported and manual checks before activation. The platform is currently designed for workers in Egypt, who need to upload their verifiable national ID and qualifications or certifications. According to Ghalayini, they "accept any nationality" as long as they are based in Egypt. So far, the platform has mainly served Egyptian youth and previously did not process payments through the platform, but its relaunched version would soon have a variety of payment options. However, when asked about refugees who do not have passports or national ID accessing Inploy, Ghalayini said: "That's not an issue for us. It's fine. But my issue is going to be with payments. If he doesn't have a bank account, how will he get his payments?". This limitation highlights a common form of exclusion of refugees from platforms, even those that operate in specific countries.

Users who set up their profiles and have successfully been activated can request to have their profile, certifications and qualifications verified, although this is not a necessity. A vetting process aims to filter out the best talent, and with their first 2,500 onboarded users, personalized e-mails were sent to help them understand how they interact with potential clients. They also engaged with them on social media accounts. Ghalayini said that their primary aim is to build the user base of the platform "based on human qualities, not based on how smart you are or how talented you are. (...) It's more about emotional and social intelligence, how you deal with people." Prioritizing quality over quantity, and social skills over technical skills, is a way for Inploy to cater to what Ghalayini sees as the specifics of the national market:



"The Egyptian market is different; in the Egyptian market, people love emotions. We live on emotions here. It's the same with clients; the client always feels like he needs to call you, needs to be reassured. He needs to talk to you personally. So, we are capitalizing on what clients love to do. We're tapping into the mindset of Egyptian, how people work in Egypt."

There is an acknowledgment by the platform that not everyone will fit the profile of upskilled digital talent they are looking for. According to Ghalayini, the majority of their workers went to international schools and "know how to sell themselves" and their services. Most workers are therefore highly skilled, but the newly launched platform may soon include some categories that require lower skill sets.

Work process and income

On the relaunched website the bidding process for projects will be streamlined around two approaches. The first is a public project posted on the website, for which all workers can apply. Workers can suggest amendments to the pricing set by the client, either demanding a higher fee or seeking to cut out competition by offering a lower fee. Clients get a list with all applicants and their prices and can then choose their preferred service provider. Alongside this public process, private projects can be offered by clients directly to specific service providers. Moreover, workers will be encouraged to bring their own clients from elsewhere onto the platform. Clients are encouraged to pay upfront, although Inploy would only release the payment to the worker if the project is complete. Owing to the current restructuring of the platform, information on pay levels was not available.

The conventional review and rating system will be complemented by human-powered "editorial picks", as Ghalayini calls it, adding that they got to know all of their 4,000 users by name and can recommend particular people. "We're not just a company that connects people, it's a full-on community." However, he acknowledged that this human-powered model is not scalable, and changes will need to be streamlined.

Support

Knowing how to set the pricing of your services as a self-employed worker can be challenging, especially for new members. This is why Inploy supports workers with free pricing consultations, as Ghalayini explained: "We ask the freelancer: what are you going to work on? How do you usually get paid? How do you rank the quality of your services? How big is the client? How many amendments and back and forth will he ask from you? We look at all the factors and suggest to them where to start their pricing." Inploy also supports workers with invoicing and tax issues, and a dedicated relationship manager can be contacted with any types of questions. Moreover, Inploy has organized workshops in the past, addressing questions such as how to price services well, how to communicate with clients, and more. The platform aims to expand their training portfolio in the future. A function to "group" workers together will allow individual service providers to subcontract other workers to join them on a larger project, which offers potential opportunities for new talents who are still starting out, said Ghalayini.

On-demand location-based platforms

On-demand location-based platforms operate in several main sectors, including taxis, deliveries, domestic work, as well as other homework services such as repair and maintenance. These location-based services often have the same identify verification requirements as web-based platforms, and in some cases pose additional barriers to access. In ride-hailing in particular, a higher level of security and safety checks of drivers can mean that refugees will not have access to the platform, even if they would own a suitable car and driver's licence. The costs of vehicles, fuels, and smartphones add further difficulties. Although delivery platforms may be less strict in this regard than ride-hailing platforms, they too tend to require

a national ID. Moreover, the mobility restrictions some refugee populations face in camps limit the extent to which they can commute into urban areas where these platforms operate. As one refugee worker at Tukole, the on-demand homework services platform in Uganda explained, the cost of transportation and the difficulty to get around poses challenges for refugees' access to such work.

The urban concentration of these services also means that they are unlikely to offer job opportunities for people living in rural or marginalized areas. And even among urban refugees who are formally allowed to move freely, the public visibility of location-based gig work can pose risks if they do not have an official permit to work. Unlike location-based platforms in delivery and ride-hailing, work on web-based freelancing platforms is more invisible since the work can be done from home. While this can have some benefits for migrants and refugees, it also makes them prone to risk. Moreover, location-based platforms diverge from some web-based platforms in the sense that the skill sets needed for entry tend to be lower on delivery or ride-hailing platforms than on major online freelancing platforms. This makes them especially suitable, in theory, for any young people that meet the basic requirements. At the same time, it is unlikely that on-demand platforms build skill sets and a reputation that is transferable into other sectors of the economy and leads to social mobility and careers.

Global on-demand platforms

The market for delivery services has recently grown significantly during the COVID-19 pandemic, while taxi services have partly suffered. Overall, there are now many major global platforms that operate in these sectors, and the major ones offer both taxi and delivery services, such as Uber and Bolt. This section will use interviews with Bolt Food and Careem/Uber as an example for the discussion around the potential role these platforms can play for job creation among youth and refugees in Africa.

Bolt Food Africa is currently operational in Kenya, South Africa, and Ghana, with plans for expansion into other African countries. Bolt, which started out as a ride-hailing platform, has rapidly expanded into the food delivery market with the growing demand created during the COVID-19 pandemic. Similar to other delivery platforms, Bolt Food operates primarily in cities and is therefore unlikely to provide work for refugees and host community members in rural areas.

In terms of accessibility, Hilary Miller-Wise, the Africa regional manager of Bolt Food, recognizes that food delivery platforms are less strict with security requirements than ride-hailing platforms. However, at the time of research, Bolt Food did not recognize any substitute to national IDs, thereby excluding refugees from becoming workers on the platform. At the same time, the platform is open to collaborating with governmental or international partners on the question of identification, if they can provide systems to verify people's identity in ways that is equivalent to a national ID, said Miller-Wise.

Proficiency in the dominant local language as well as in English is another requirement at Bolt Food Africa. In Kenya, for example, where many locations in delivery work do not have conventional addresses, riders frequently need to communicate with clients over the phone to identify the correct location. The overall skill requirements for food delivery are low, aside from the ability to ride a motorcycle and understand the basics of good customer service.

Although its ID requirements do not currently cater for refugee workers, Hilary Miller-Wise saw potential for future change in this respect. One example are refugee settlements or ethnic minority areas where it is difficult to operate for outside riders, such as Nairobi's Eastleigh neighbourhood. "There is a lot of opportunity to target these areas", said Miller-Wise, adding that using local couriers who speak the language would be beneficial. Overall, she saw certain refugee profiles fitting Bolt Food's requirements and needs, as long as some of the main obstacles around identification can be overcome in collaboration with governments.

Uber is one of Bolt's major competitors and it acquired **Careem** for US\$3.1 billion in 2020, making it Uber's subsidiary platform in the Middle East and North Africa region. The platform was at one point banned in Cairo owing to resistance from the traditional taxi sector and regulation requirements by the government, but the ban was lifted by a court and after Uber agreed to pay VAT.

In terms of accessibility, in order to join Careem as a driver, one needs a driving licence and a passport, proof of address, an e-mail account, and usually a bank account. However, according to Danya Bashir, a start-up expert for the MENA region who worked with Uber and Careem and contributed to their merger, a lot of Egyptian drivers who wanted to join did not have bank accounts, "so we ended up transferring their money to a finance house where they could get a cashiers' check – like [the e-payment platform] Fawry". This was in the early stage of Careem's operations. According to Careem's website, joining now includes a screening process that may require "drug tests, police reports, credit checks, etc.". Moreover, "documents required include but are not limited to: driving licence, national ID card, vehicle registration documents, insurance, recent profile picture".¹⁵⁶

These rather stringent pre-conditions for working on taxi and delivery platforms pose barriers for refugees and migrants, who would not usually have a driver's licence and do not hold national IDs. This exclusion of refugees was confirmed by Bashir, who said "they just can't work with us unfortunately if they don't have any papers". She added that driving licences and cars were also a requirement that might exclude certain migrants and refugees. However, mirroring the position of Bolt Food, there is an acknowledgment that platforms such as Careem and Uber could play a much more inclusive role if the verification requirements were mitigated somehow for refugees and other non-nationals. As Bashir put it: "I think if we were to find a way to support the people who don't have IDs or driving licences, or don't have proper means for employment, that would be one area where we could truly contribute to balancing some of the inequities experienced by marginalized areas".

At the beginning of expanding Careem under Uber in Egypt, they were unable to get enough riders to ensure sufficient supply and spread, which is when they paid riders a fixed amount on a monthly basis for some period, according to Danya Bashir. She added: "And then in terms of incentives we did different things as well: we had training programmes, we partnered up with educational institutions to provide drivers with some learning and upskilling opportunities, we partnered with charities ... so as to get those people working with you to feel more like a community, a culture that they're proud to be part of, proud to be Careem Captains or Uber drivers". Some partnerships, such as one with car services to provide discounts on buying cars and repairing them, were also established, and even a partnership with barber shops. There have been efforts to facilitate access to a car for those who wanted to work with Careem but didn't have one, through private individuals and car rental companies lending their cars and subsidies for the costs.

While these incentives for drivers appear useful, they are ultimately part of a business model that requires a critical mass of workers on the platform – an intentional over-supply – in order to operate successfully. Based on these examples of Bolt Food and Careem, it becomes clear that delivery and taxi platforms take up an ambivalent position when it comes to the employment of marginalized youth and refugees. The barriers to entry are generally very low, making it a potential resource for income generation among youth even if this kind of work offers little opportunity for career progression. However, for several reasons, these platforms are not suitable for youth living in rural or marginalized areas and refugees. These reasons include: concentration in major urban centres; relatively strict ID verification and security requirements; and the need to have access to a car or motorbike and the associated costs.

Country-specific on-demand platforms

As discussed in more detail above, taxi and delivery services are the major sector for location-based ondemand services, but they are not the only ones. Interviews with platforms showed that skilled workers in various fields can benefit from the increased access to clients they facilitate. Similar to the country-specific web-based platforms, on-demand platforms that are rooted in the countries and communities where they operate appear to offer more support and prioritize inclusion in ways that some global platforms

¹⁵⁶ https://drive.careem.com

do not. The following discussion looks at the homework on-demand platforms Lynk (Kenya) and Tukole (Uganda), underlining the opportunities they provide while highlighting some major challenges they pose for decent work among refugees and youth.

In focus: Lynk (Kenya)

Lynk is a digital platform operating across Nairobi for on-demand services in 32 categories of work for households, businesses and larger projects in construction, ranging from installations, repair and maintenance to cleaning, decor and furniture making.

Accessibility

The level of payment and the ease of access to becoming a worker through the platform varies between different types of services. According to Akinyi Ooko-Ombako, Director of Operations and branch manager at Lynk, furniture makers can join on the basis of their experience and do not need any official qualifications, while other professions might require proof of the relevant skills and training. "We ask questions, including where have you worked, who are your references, we will call your references to make sure you're a legitimate person and then test you out on the platform. We also want to see your actual portfolio (...) if you have a workshop, we will send a representative to see your workshop", said Ooko-Ombako, adding that the process is different for professionals in the installation, masonry, painting or beauty sectors, where workers would need some form of certification.

Language requirements are generally English and Swahili, although the platform has worked with professionals who have a high skills level but do not speak English well. In such cases they assign a site supervisor who is responsible for communication, although this is the exception rather than the norm. Payment works through bank transfers or mobile money, with the latter being by far the dominant mode of transaction on Lynk. Service providers often receive a down payment in advance and a final payment after finishing the job.

Support

Lynk has been running an incubation programme that supports new workers with a salary and upskilling opportunities as part of a Lynk Academy. These workers were often fresh out of school and needed support to become independent contractors on the platform. When graduates of the programme transitioned into the market, they were provided with a stipend for at least one month to get them going.

The COVID-19 pandemic hit some on-demand service platforms hard, Lynk being no exception. When COVID started, Lynk ensured that professionals were compensated with a month of pay regardless of whether their clients continued to engage them or not. Moreover, the platform provided a monthly transport allowance of 30,000 shillings (US\$30) to each worker, distributed PPE, conducted sensitization trainings and reached out to partners for additional support.¹⁵⁷

Suitability for refugees and disadvantaged youth

Lynk distinguishes itself through an algorithm that allocates work to service providers by taking into account their needs: the platform locates the closest worker available for a job but also prioritizes those who have not done many jobs recently, thereby "making sure that everyone has access to equitable job opportunities", according to Ooko-Ombako. This intentionally takes the platform away from what Lynk calls the "Uber-like" bidding system, aiming to create a fairer system of job allocation. This also mattered when Lynk worked with refugees in the cleaning sector, where they aimed to

¹⁵⁷ https://medium.com/caribou-digital/tough-gigs-on-demand-labour-and-freelancing-conversations-with-africas-platformworkers-d6d22b3c030d.

"eliminate the bias" of the system. This fair distribution of work, alongside its incubation programme and other support provided, make Lynk a potentially inclusive and supportive employer of refugee workers who meet the minimum requirement for accessing the platform.

In focus: Tukole (Uganda)

Tukole is a Ugandan platform operating in Kampala and surrounding areas, which connects workers in manual fields of work to local clients, including plumbing, electrical work, carpentry and the beauty sector. According to Allan Okello, the business leader, Tukole is a marketplace that "connects skilled and semi-skilled youth to job opportunities [and] to customers". Services are requested by clients on the platform, where they can choose their preferred service provider.

Accessibility

Signing up for the platform online requires documentation and information about personal details, including a national ID number, eligibility, evidence of expertise, references, as well as information about pricing of services and availability. Although the platform's application form asks for a national ID, Okello said that they accept alternative forms of ID, including an Alien ID card and refugee attestation documents. Moreover, a "local resident representative" is required to write a letter to confirm the applicant's place of residence. The platform offers a variety of payment mechanisms, including mobile money, cash, US\$ code, bank accounts and cheques.

Apart from the required evidence of expertise in their respective field, prospective workers are expected so speak some English, although this is not an absolute requirement.

Work process and income

Pricing is negotiated between the service provider and the client. Tukole usually takes a 20 per cent cut on transactions, in some cases 10 per cent, and for cleaning services 5 per cent. According to Okello, people from marginalized backgrounds, and especially refugees, "find it slightly harder to compete with the host communities due to reasons including linguistic challenges, and people just being more comfortable with local labour".

Support and progression

Tukole primarily seeks skilled youth who already know their trade and do not require additional training. They do, however, provide advice and support in acquiring hardware and tools where needed. The platform considers the work that self-employed workers do through Tukole as a contribution to their career progression. According to Okello, "there is an accumulation of soft skills which can be transferred to various fields. The work we do is regarded as high-demand work. No matter where you are in the world you will always need a mechanic to fix something, so the work will always keep them employed either by organisations or self-employment."

Social impact labour platforms

Social impact platforms are digitally enabled intermediaries that facilitate the connection between workers and clients, but unlike larger profit-oriented platforms, they have a dedicated social impact aim and support workers in a variety of ways. Social impact platforms rarely require individual workers to bid for jobs and invest unpaid labour time, since the bidding is done by the enterprise. The matching process between workers and clients can be as simple as an online booking and payment system for students who seek online language sessions that are then held via video call, as in the case of NaTakallam. However, many

social impact platforms do operate in strictly digital fields of work, as in the case of digital annotation tools used by refugees who work in micro-tasking for social enterprises in the field of AI data training. What distinguishes these actors from the conventional digital economy is that they create an incubated labour market for refugee workers that is governed by its own rules and principles, and not subject to direct competition with crowd workers and online freelancers from all over the world. This does not mean that these social enterprises exist outside the global market, since their pricing needs to take into account the wider competition on the market. Moreover, these platforms also charge workers a commission, usually around 30 per cent, in some cases as much as half of the rate charged to clients. Given the small scale of these businesses and their investments into training and support, most of this income is used to cover the operational costs of the enterprise. This means that a significant share of the workers' labour funds part of the sustainability of the enterprise, thereby reducing the actual value of their work. The availability of clients and projects for these small-scale platforms is often inconsistent, which requires them to retain significant funds to ensure sustainability for times when enough work is not available. While it is clear that they are also looking to make a profit where they can, the primary motivation for these enterprises is to wield positive social impact among refugees, migrants and disadvantaged youth through digital work. Some social impact platforms promote their services openly among clients as a contribution to refugees, while others keep this social impact aspect in the background and focus on a different value proposition.

Learning Lions, Digital Lions, and Startup Lions are three pillars in a non-profit organization that aims to fight poverty through digital opportunities with a focus on northern Turkana, Kenya. According to the co-founder Brian Were, they focus on individuals from regions with a lack of opportunities, including refugees. Digital Lions is a "Fair Trade Digital Outsourcing Agency", while Learning Lions equips students with IT and media skills and encourages them to become entrepreneurs through a Startup Lions incubator by "selling digital services online".¹⁵⁸ Payment levels depend on the value of a particular project. As an example, if someone wants their website to be redone, Digital Lions would negotiate the price and then the individual worker would receive 70 per cent of the revenue, while 30 per cent goes to operational costs and the larger organization.

Accessibility requirements are generally very low, with Were saying that "the only requirement is that one has to be competent in the field of work they are interested in". But recruitment for the Digital Lions outsourcing platform prioritizes the graduates of the Learning Lions programmes, "because we know they know how the organization works so we don't have to train them again". In terms of verification of workers' identities, the platform accepts Alien IDs and refugee documents and currently has two refugees actively working on projects. There are various payment modalities for transactions through the platform, including mobile wallets and M-Pesa alongside traditional bank transfers. Although English skills are preferred, they are not a must, and Digital Lions assists workers with limited language abilities.

Training and support are built into the pathway. The Learning Lions' Basic Training takes three months and builds the students' elementary computer skills, training them in communication, teamwork and time management while giving insight into the different areas in which they can specialize in the Advanced Training. Students who perform well in the Basic Training can continue specialized training for six months, practising digital services that can be sold in global online marketplaces, supported by mentorships. Areas of specialization include, among others, software development, mobile application development, graphic design and database management.¹⁵⁹ Ideally, students of Learning Lions would begin selling services on Digital Lions and then transition to become entrepreneurs through the Startup Lions incubator. Sustainability and transferability of skills learned are written into the structure of the pathway, which aims to create a transition from training to individual freelancing to entrepreneurship. Were gives an example of a refugee from South Sudan who studied at Learning Lions and started his own business on an online platform, "making good money".

Several other important social impact platforms have a dedicated aim of supporting refugees, although many operate in specific countries. The Bulgaria-based Humans in the Loop (HITL), for example, employs refugees, migrants, and people in crisis-affected countries in the field of AI data training and image

¹⁵⁸ https://www.learninglions.org.

¹⁵⁹ https://www.learninglions.org.

annotation. Initially launched in Sofia, Bulgaria, to source work for the local refugee population, it has since expanded into Turkey, Iraq and Syria in collaboration with partner organizations on the ground. In 2019, they employed a total of 167 image annotators. HITL stands out from many other operators in the field of image annotation through its support of disadvantaged workers and its aim to shape policies that guide their practice towards fair working conditions.

Humans in the Loop has used its experience in supporting and employing workers with refugee backgrounds and other marginalized contexts to develop a Fair Work Policy. This policy is specifically geared to the field of image annotation and AI data training, but many of the general commitments are also relevant for other sectors of the digital economy. The policy covers a wide range of areas, including recruitment, communication with annotators, payments, and rules governing the bidding for client work. As part of recruitment, the HITL policy states that recruited workers who are not eligible for social protection and national health insurance will be given information about where and how they should pay their own national health insurance contributions, while also having access to the enterprise's own internal health insurance programme for accidents and injuries at the workplace. Moreover, the policy states that "we are committed to offering employment as annotators to vulnerable populations, specifically conflictaffected people who ordinarily face legal obstacles in securing employment and receiving payment".

In its communication with annotators, HITL is committed to offering clear written agreements for workers that outline details about the project, expectations, and wider purpose of the work. Annotators receive training for each project, will be informed about and paid for extra work if it arises, and have a process in place to appeal non-payment. As for payment, HITL has committed itself to paying workers at least above the local minimum wage, which is overridden by the global HITL minimum wage level set at 3 euro per hour if the local minimum wage would be lower. Higher skill levels also mean higher payments, ranging from basic (3 euro) to advanced (5 euro) minimum per hour. In terms of the cut that HITL takes from the income generated by workers, the commission appears quite substantial. According to the policy, only 50 per cent of earnings go directly to the annotators, while 20 per cent is spent on "supervision and quality control" and 30 per cent on overheads, including administration, sales and training. The Fair Work Policy includes a range of additional policies and commitments that are designed to create a transparent and supportive work environment.

The relevance of image annotation and microtasking as a source of online work with low barriers to entry becomes evident in its growing use among social impact-oriented initiatives. In addition to HITL, there are several other platforms that operate in this field. In Uganda, Refunite's LevelApp has achieved significant impact among refugees and host community youth. LevelApp was initially launched as a humanitarian initiative to bring livelihoods to refugees in Uganda through online work, but it soon became redesigned as a social enterprise. With 28,725 users, or annotators, who labelled more than 260 million images, it reached an impressive scale just before the COVID-19 pandemic led some of its core clients – such as H&M and Facebook – to drop the ball.

Refunite's core aim has been to connect refugees with family members and loved ones through a database. It was during this effort that the organization saw what Alexander Bugge, its Chief Operating Officer, called "this transformation of tech", and the challenges refugees faced in getting access to paid labour. LevelApp was set up as an Android application so that users could annotate and work from their phones, and they were paid with mobile money. After a pilot, the platforms went from 200 to 20,000 users who installed the app within 10 weeks. At its peak, they had some 28,000 users and another 18,000 on a waiting list. Ultimately, the transformation from the pilot to a sustainable business was undermined by the pandemic and the lack of clients. The work annotators included training data for machine learning of CCTV cameras that could identify purchasing behaviour, which involved vast amounts of video materials to be annotated. Other work included annotations of images of steel samples during production, aimed at training algorithms that can detect deficiencies in steel production.

LevelApp was very easily accessible, which in part explains its rapid user growth. To access the platform, users only needed an Android device and access to a mobile money account. A questionnaire was part of the onboarding process to classify their backgrounds, and users needed to complete successfully a test with four tasks in order to start working on projects. Bugge acknowledges: "We only took the most

competent users who did the best results for work on paid projects. The tasks would go to top performers first. It's a very competitive environment. There is no shortage of supply." While refugees were the initial focus, Ugandans soon represented more than half of the active workers, according to Bugge.

Despite training materials being built into the application, many workers faced challenges with technology literacy. "If you had a big image you had to pinch the screen to zoom in, and some may have struggled with how to do that", said Bugge, adding that they did not have the capacity to work in supporting everyone who struggled, and focused on those who were already capable of doing it. On the demand side, the main challenge has been to convince clients that LevelApp is a suitable vendor offering the right mix between speed, price and quality, while also being able to outsource work effectively on large datasets.

As for the question of pricing and income for annotators, Bugge said that a common example of an average income per hour in Uganda would be 5,250 shillings, or about US\$1.4. He added: "That's huge, for most of our users at least. More than 50 per cent reported they had no income before starting work on the app. The majority reported around 2 dollars a day in manual labour income before, whether farming or childcare. It's a pretty attractive price for quite a lot of Ugandans." However, the work fluctuated, and most users would work around five hours a day, taking home around US\$11 per day, or around \$231 USD for 21 days of work a month.

Owing to the disruption caused by the COVID-19 pandemic, by April 2021 LevelApp only had a few hundred tasks available to its top workers and was in dire need of new partners and clients. Though LevelApp stands out as a success story, its unexpected decline also points to the vulnerability of these platforms as long as they remain dependent on few selected partnerships and clients. After all, image annotation is a highly competitive global market, and the number of companies offering this service has grown significantly.

Other social enterprises that connect refugee workers to online income opportunities operate in the field of language services, including remote language training and translation. One important social enterprise employing refugees in this sector is NaTakallam. It connects refugees and displaced people to income opportunities in the language sector as online language tutors, translators and cultural exchange instructors. NaTakallam was initially founded to support Syrian refugees, and the original offering was one-on-one language practice over Skype, specifically for Arabic with Syrian refugees.

Since 2015, NaTakallam's services have significantly expanded in terms of services and languages offered. They now propose language-learning sessions in Arabic (with Syrian, Iraqi, Palestinian, Egyptian and Yemini displaced persons), French (with refugees form Congo DRC, Burundi and Guinea), Persian (with Iranians and Afghans) and Spanish (with Venezuelans and Central Americans); professional translation services in more than nine languages including Arabic, French, Kurdish, Pashto, Persian (Farsi/Dari), Portuguese, Spanish, Tigrinya and Urdu, with competitive pricing, personalized service and curated language learning and cultural exchange programmes in schools, universities and organizations worldwide. Since 2015, NaTakallam has paired almost 200 displaced persons and over 9,000 individuals in more than 100 countries who have engaged in more than 30,000 hours of NaTakallam sessions. Displaced people have self-generated over US\$900,000 through their work with NaTakallam.¹⁶⁰

As for payment levels at NaTakallam, a survey conducted by Andreas Hackl in collaboration with the enterprise in 2020 showed that 35 per cent of 82 surveyed workers earned less than US\$200 a month, 44 per cent earned between US\$200 and US\$400, while 21 per cent earned between US\$400 and US\$600 or more. Although this freelance work constituted between 75 and 100 per cent of total income for about a quarter of NaTakallam's workers, 30 per cent said it represented less than 25 per cent of their total income, and another 30 per cent said that it was between 25 and 50 per cent. Another job and support from family members were the most common sources of additional income.¹⁶¹

¹⁶⁰ https://natakallam.com/impact/.

¹⁶¹ Andreas Hackl and ILO, Digital Refugee Livelihoods and Decent Work: Towards Inclusion in a Fairer Digital Economy, 79.

E-commerce platforms

E-commerce platforms can be business-to-consumers (B2C) and business-to-business (B2B). The most prominent example for B2C is the online retail sector, where small and large businesses can sell goods to customers over the internet. Many of these platforms enable SMEs and individual entrepreneurs ("third-party sellers") to promote their goods online and access a larger customer base.¹⁶² Examples of the B2B domain are agricultural platforms that help farmers buy supplies or sell their produce to markets. Some e-commerce platforms also have a dedicated social impact aim, such as UNHCR's Made 51, which sells refugee-made products, or Afrikrea, which connects African artisans and vendors to global customers. The growth of e-commerce platforms has particularly supported the large number of informal small enterprises across Africa, ranging from grocers to farmers and artisans.

The functions of e-commerce platforms as a marketplace does more than matching buyers and sellers. As Caribou Digital points out, these marketplaces help with aggregation and distribution, namely matching supply with demand and facilitating visibility; they can ease transactions, may enhance the credibility of a business, and often offer metrics, analysis, and advice.¹⁶³ For example, some e-commerce platforms make it easier for sellers to keep stock of their items, transactions and income, while some also offer tailored support and advice on how to grow a business and run it effectively. Platforms such as Sokowatch, which is based in Nairobi, have developed B2B e-commerce supply chains for informal retailers across Africa, who can order goods by SMS or mobile app. Jumia, the largest e-commerce platform, exemplifies the integration of many different products into one single application – Jumia One. Vendors are supported with training opportunities and various tutorials on how to ship orders, grow sales, and keep accounts.¹⁶⁴

However, e-commerce platforms also charge commission on sales, and this can pose challenges to making profits for small and informal enterprises. Moreover, some e-commerce platforms require vendors to list their items on only one platform, thereby making it difficult to use several platforms at once. It is further important to note that e-commerce often takes place through conventional social media channels, making use of freely available applications such as WhatsApp to circumvent formal e-commerce platforms. Among small and informal businesses in particular, it is common "to use the free consumer-facing part of social media as the business channel, blending the personal and the professional in 'social commerce".¹⁶⁵ This will become evident below, for example, in the case of a Ugandan worker giving language classes on NaTakallam while also running his own business with his wife, where they sell grain and porridge mixes within their local community using social media channels.

Generally, there appears to be a lack of awareness among e-commerce platforms about the specific challenges faced by refugees, and no knowledge about the extent to which refugees might already use major platforms such as Jumia. Refugee entrepreneurs in a variety of host countries continue to face a number of specific challenges that can undermine their ability to build and grow businesses, including travel restrictions, complex regulations, restrictions on banking and financial services, financial risks, limited funding and investment options, language and cultural barriers, psychosocial trauma, social exclusion, unfamiliar business environments and uncertain futures.¹⁶⁶ In terms of e-commerce, these challenges are coupled with difficulties to ensure good internet connectivity in camps and settlements, and national legislation that sometimes prevents refugees from operating a formal business.

¹⁶² ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 41.

¹⁶³ Caribou Digital Publishing, Platforms and Livelihoods in Sub-Saharan Africa—Learning Advances in Digital Finance, 2019.

¹⁶⁴ Ibid., 22.

¹⁶⁵ Ibid., 13.

¹⁶⁶ Ahmad Sufian Bayram, Entrepreneurship in Exile: Insights into Syrian Refugees Startups in Host Countries, 2018.

General e-commerce platforms

Jumia is Africa's largest e-commerce platform, with over a billion visits to the marketplace and more than 110,000 local African sellers having done business there in 2019.¹⁶⁷ The platform is renowned for its complementary logistics network, consisting of more than 200 logistics partners and hundreds of pick-up stations and drop-off locations. Founded in 2012 in Nigeria, the platform has expanded rapidly and launched various sub-platforms, including Jumia Food and Jumia Travel, which are all incorporated in the Jumia One app.¹⁶⁸ Jumia also runs a so-called JForce programme that invited motivated young entrepreneurs to become "consultants" and earn money through a commission for selling Jumia products.

Accessing the platform as a seller is relatively straightforward, according to Samantha Abaho, PR and Social Media Manager for Jumia Uganda: "You just have to register online and give us your bank account". However, she added that this is also "where the problem may be for people without valid documents, as you would need it to open a bank account in order to register with us". Moreover, a good understanding of English and the local language is also required for the logistics wing of the platform, especially with deliveries being carried out in urban centres. Jumia also lays out policies and guidelines that sellers must follow, including lists of prohibited goods, packaging and delivery guidelines, and a Code of Conduct.

Jumia Pay integrates a wide variety of locally used payment options, including card payments, mobile money, bank transfers, and cash transfers. According to Jumia, this "contributes to the development of dematerialized payment solutions which are key to the success of e-commerce and an important asset when it comes to development prospects".¹⁶⁹ Jumia, like most other e-commerce platforms, charges vendors a commission fee. According to Abaho, examples for this are 15 per cent for fashion items and 10 per cent for electronics. Jumia also incorporates the on-demand delivery platform Jumia Food, which charges a commission fee of 16 to 20 per cent.¹⁷⁰ Vendors receive support in return. Once they register with Jumia, vendors are offered a dedicated new seller training, which takes them through the process and offers insight for making their business stand out on the platform. The JForce agent programme for so-called "sale consultants", who make commission from selling Jumia products, also includes training and skills-building.

Jumia does not have data on the extent of refugees trading and working through the platform. At Jumia Uganda, the slightly problematic perception was that refugees are welcome as long as they work hard. Abaho said: "I think the refugees, or marginalized communities, work extra hard because they know nothing is handed to them and so we actually get on very well with them". This reflects a general impression that most major e-commerce platforms are not aware of the extent to which refugees trade through their platform, nor are they familiar with the specific challenges they might face.

Selling goods to customers online has enabled many small informal enterprises in Africa to grow and flourish. This is no less true for B2B platforms, which allow these businesses to purchase goods, access new markets, and run their enterprise more efficiently.

MaxAB is a B2B e-commerce platform in Egypt for wholesale food and groceries, which connects small shops and merchants with manufacturers. The platform sees itself as an aggregator and consolidator of traditional small-enterprise trade that reaches out to some of Egypt's most underserved areas. With around 1,800 products on offer, a grocer or shopkeeper can order items through a mobile application that also allows them to check their inventory and plan resources. MaxAB has around 20,000 retailers, of whom some 18,000 are in Greater Cairo, including in marginalized areas such as "atraf el-dairy", which is a common expression for underserved settlements at "the margins of the ring road".

169 Ibid.

¹⁶⁷ https://group.jumia.com.

¹⁶⁸ Jumia Press Kit, p. 11: https://group.jumia.com/wp-content/uploads/2020/10/Jumia_presskit_2020_1.pdf.

¹⁷⁰ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 89.

According to Mohamed Ben Halim, a co-founder, "the more you go into the outskirts of big cities, the more this solution is needed, yet the tech adoption is poorer and less organized". Asked about how MaxAB contributes to growth and entrepreneurship, Ben Halim said: "We own one fourth of the retailers in Greater Cairo, as in one fourth of Greater Cairo is with us on MaxAB ... So that's telling."

In terms of accessibility, MaxAB serves the largely informal grocery market and therefore has very low onboarding requirements. "We know that most of our retailers don't have a registration card for their businesses, because it's an informal market. So we integrate that in our model", said Ben Halim. This openness to informality suggests that MaxAB is accessible for informal refugee grocers and entrepreneurs, although the extent to which migrants and displaced persons are already using the platform is unknown. The data that their mobile app collects offers a comprehensive picture of the revenues and cash flows of the informal market. This underlines that e-commerce platforms offer much more than simply a venue to trade online: they can become resources for effective business management, too. Indeed, MaxAB has plans to offer microfinancing to shops in the future, to help shopkeepers manage their business and cash flows, and to expand beyond Egypt into other African countries. The app already aggregates data and helps shopkeepers to forecast their purchase needs. The aim is to help retailers save between 10 and 15 per cent in the near future.

Supportive infrastructure: digital business services and payment solutions

Setting up and running a business with the help of digital technology is increasingly enabled by providers that facilitate core processes such as payments. One of these platforms in East Africa is Mookh, which comes out of event ticketing and music sales and now offers a payment system to help small businesses get online faster. Mookh's ticketing platform has served some 3,500 vendors in Kenya, Uganda and Rwanda and facilitated around US\$5 million worth of transactions, according to George Gachui, one of Mookh Africa's founders and directors. Mookh provides an easy-to use payment gateway for online stores with a variety of payment options, including M-Pesa, debit and credit card payments. The platform takes 8 per cent commission on any ticket sales and 15 per cent on music.

While ticketing may not be the first e-business option that comes to mind when one thinks of online income generation among youth and refugees, there is a wide range of scenarios where young entrepreneurs can make use of it, be it for an event surrounding their start-up, or for conferences and workshops. Some features of the platform, such as loans offered through its payment service, require national IDs or passports in Kenya, to comply with the rules of the Kenya Revenue Authority (KRA). Mookh's terms of service state that one must register a valid bank account and an M-Pesa enabled number to sell through the platform and receive remittance from Mookh. The prohibition of using the platform for "any unlawful purposes" also raises the question of whether selling online might entail risks for refugees who are not legally allowed to operate a business in a given host country.

Sky.Garden is a similar platform that allows businesses an automated system to upload, showcase and sell their products, while the platform handles payment processing and other core aspects of the transaction. The Sky.Garden Marketplace is where consumers can buy products put on sale by businesses, while online payment options include M-Pesa and credit cards as well as a digital Sky.Wallet. Similar to Mookh, Sky.Garden also offers its own loan service. According to Esau Okumu, Head of Customer Care and one of the founders, Sky.Garden handles everything for the business, including delivery, which is outsourced to other companies. The initial aim of the platform was to serve small vendors who could not afford to wait for months for returns on larger e-commerce platforms, to create a platform that also works for someone "who is only selling two phone models", said Okumu. In terms of accessibility, vendors need a phone number and an e-mail address, although vetting for the logistics companies that deliver goods is more difficult because of government business regulations. Okumu said that the platform has enabled many smaller businesses to trade, adding that the "average age is 30, we have a lot of young people trying to make extra cash online". While there is no formal requirement that would exclude refugees from using the platform, the extent to which refugees already trade on it was unknown.

Digitalization for agriculture: serving the smallholder farming community

Digitalization for agriculture (D4Ag) is widely seen as a game changer in supporting and accelerating agricultural transformation across the African continent. Indeed, "digital tools can improve market efficiency, transparency, aggregation and integration", alongside investments in physical infrastructure, such as roads and electricity, as well as "human infrastructure" with financial agents, agro-dealers, and agent networks.¹⁷¹ As of 2019, there were at least 390 active D4Ag solutions across Africa, and nearly 60 per cent of these solutions were launched in the three preceding years alone. Although digital solutions register more than 33 per cent of smallholder farmers, estimates suggest that only 42 per cent of these registered farmers and pastoralists actually use digital services. These solutions span five areas: advisory services; market linkages; financial access; supply chain management; and macro agricultural intelligence.¹⁷² Although private sector investments remain low and have been driven primarily by donors, farmers who actively use smart digital solutions report major yield improvements, better market linkages, and income improvements of between 20 and 40 per cent. Farmer self-reporting even indicates yield improvements in the range of 50 to 300 per cent and income improvements in the order of 20 to 100 per cent.¹⁷³

The role of digital platforms in agriculture is evidently growing across Africa and emerging as a key driver of smallholder farming in Uganda in particular. The research included three digital initiatives in agriculture to assess the inclusive and productive potential of digital platforms in this sector. The three initiatives are Nampa Farmers' Market, Agro Supply, and Smart Farming. While there are similar digital initiatives to support agriculture in other countries, this section focuses on D4Ag in Uganda.

Nampya Farmers' Market is a mobile-based food distribution and logistics platform connected to smallholder farmers, with informal retail food vendors in cities and townships. The idea grew out of what the CEO and founder Mark Matovu calls "a sad story". When Mark was young, his single mother was deprived of her agricultural earnings by middlemen, resulting in a lack of resources to pay fees and her children having to leave school. Mark managed to continue his education with a scholarship and completed a computer science degree at university. During his research, he was approached by people in Dubai asking him to assess the feasibility of exporting bananas there from Uganda, and he realized the major challenges of competing on the market. He looked at supply chains and eventually came up with the idea of the farmers' market in 2016. The digital marketplace now has 2,040 farmers on board, connected to 310 food vendors, of whom 85 per cent are women aged between 22 and 39. The platform facilitates the movement of the produce from the farm to the doorstep of the food vendors, while charging a mark-up fee on every delivery made, but nothing on the side of the farmers.

In terms of accessibility, the primary requirement for joining the market is access to agricultural land and registering with Unstructured Supplementary Service Data (USSD). USSD is a protocol used by GSM cellular telephones to communicate with the mobile network operator's computers. This can be used for mobile-money services. Prospective members who registered with USSD on their phone will then be visited by a site team of the market for a vetting process. Instead of IDs, mobile phone numbers are used as a unique identifier for farmers, vendors and drivers. Mobile money is used for payments. These characteristics indicate good accessibility of refugees who benefit from the low-tech approach of the platform and its low entry requirements, although the extent of refugees using the market was not known.

¹⁷¹ Michael Tsan et al., The Digitalisation of African Agriculture Report 2018–2019, 2019, 16–17. https://cgspace.cgiar.org/ handle/10568/101498.

¹⁷² Ibid., 18.

¹⁷³ Ibid., 20.

One of the main benefits of the platform is that it cuts costs from using middlemen. According to Matovu, using the platform instead of traditional middlemen and brokers results in 40 per cent higher sale price for some farmers. Together with access to a stable and reliable market to sell produce, farmers have access to the digital payment system and digital payment records, which some have used to obtain credit from financial institutions. The market has a team to assist vendors who experience problems, including customer service. Moreover, Matovu suggested that the market helps famers and vendors to build skills through interacting with digital technology and with different communities. He also considers the financial gains achieved through participating in the market as a contribution to the younger generation, because access to stable markets and higher profits allows farmers to pay for their children's education.

Agro Supply is another digital platform and solution that improves farmers' market access, while also helping them to plan and invest their money well. Agro Supply is a digital platform that connects farmers with a financial management system for agricultural input, increasing the farmers' income and easing access to markets. Farmers manage money with the help of prepaid scratch cards as part of a layaway system that helps them avoid making debts through loans.

The need for the digital platform became evident to Joseph Ogwal, co-founder, in 2017. "We wanted to provide smallholder farmers with agricultural input. We found out they have a lot of money when they are selling their produce, but they have a 3- to 4-month period that follows in which they are not doing anything, and they spend their money. So, when then the rain comes, they often don't have money to buy seeds and invest." A smallholder farmer who is selling maize, for example, has US\$300 now and they would sit down with Agro Supply's agents to determine their farming goal for the coming season. "How many acres, how much will that cost, will they need fertilizer, seeds, and so on", said Ogwal, adding: "So they make this payment when they still have the money. When the season comes, we just deliver the input without putting them on credit."

There were about 250 refugee farmers in Bidi Bidi and other areas of Uganda who use Agro Supply, said Ogwal in early 2021, adding that they benefit not least because it is often very difficult for them to obtain affordable loans. Agro Supply is very low tech and does not require a smartphone or internet, which is important since it operates in remote and rural areas. Farmers obtain physical scratch cards that are sold by agents. They pay them the amount they want to lay away and then send an SMS with the scratch-card number and their farmer ID to make the payment. The system works on the basis of SMS and USSD. In terms of support, Agro Supply offers farmers knowledge and training through regular messages about different kinds of crops, about planting and agriculture, while connecting them to buyers on the market.

Purchasing certified farming input at affordable prices has been another important opportunity provided by digital platforms in agriculture. Smart Farming in Uganda is an online "supermarket" for affordable farming input such as seeds, fertilizers, and equipment. The platform also offers business plans for farmers and a situational livestock analysis. A vetting process is designed for proof of identity, asking applicants to provide reference letters. There is no need for ID verification, and local council chairmen can be used to confirm identification and residence. Payment options include bank transfers, mobile money, cash and cheques. According to the CEO Nyafunza William, the English language is a requirement, because most clients speak English.

Overall, these platforms underline the important role of digital technology for supporting smallholder farmers to access markets for sale and purchase of supplies and goods. Moreover, these platforms tend to lower the uncertainty that many farmers face in managing their finances amid seasonal changes, while also reducing the cost of using intermediaries and more generally, the cost of goods themselves. One of the main limitations remains the requirement to operate on a low-tech basis, since many farmers have neither access to reliable internet connection nor smartphones. Expanding connectivity and hardware access in rural areas could therefore yield even greater benefits for farmers, since it would allow e-commerce platforms to use advanced ICT systems in their support. Moreover, it is precisely this low-tech and inclusive approach that allows refugee farmers and host community farmers in rural and marginalized areas to access and use the platforms for their benefit.

Digital skills initiatives and training

As well as the realization of basic digital connectivity, digital skills training is a foundational pillar for the inclusion of disadvantaged and underserved communities into the digital economy. Indeed, digital skills are considered to be "key to combat digital exclusion".¹⁷⁴ The digitalization of labour markets around the world has reshaped the skills that workers need to succeed in their work lives, including the demand for data skills, entrepreneurial skills, and so-called "human skills" or soft skills.¹⁷⁵ Although access to digital skills training is no less unequally distributed as is access to the digital economy itself, the offerings of programmes and online courses have grown significantly over the last years, and in particular in the form of online remote resources during the COVID-19 pandemic.

Africa is set to benefit from digital outsourcing as the digital economy grows globally, with some individuals and communities being in a position to take advantage of remote work opportunities. However, while there are opportunities as a result of digital outsourcing, one needs to be cautious about the quality of employment that is created in this process. In any case, digital skills will be "important to ensure that the youth are prepared for the future of work in the digital economy".¹⁷⁶ The challenges appear huge: formal education in the region does not offer sufficient training in IT skills, with less than 1 per cent of children in Africa leaving school with basic coding skills. While many tasks done on digital labour platforms do not require coding skills, this lack of IT literacy nonetheless indicates that there is a major skills mismatch. Non-formal training programmes, such as coding bootcamps, have been filling this gap, while university curricula are failing to equip IT graduates with skills appropriate for the current and future workplace.¹⁷⁷

However, one of the major problems of the digital economy has been that it contributes to a skills mismatch. This problem is of particular relevance to on-demand location-based platforms and microtask platforms, where highly skilled workers often undertake work requiring low skills. Moreover, as the case of Egypt below shows, the general push towards getting youth into online freelancing through focused

¹⁷⁴ European Commission, Human Capital: Digital Inclusion and Skills. Digital Economy and Society Index Report 2019 (Brussels, 2019). https://ec.europa.eu/digital-single-market/en/human-capital-and-digital-skills.

¹⁷⁵ Burning Glass and BHEF, The New Foundational Skills of the Digital Economy: Developing the Professionals of the Future, 2020. https://www.burning-glass.com/wp-content/uploads/New_Foundational_Skills.pdf.

¹⁷⁶ Mercy Corps and Moringa, Competing in a Digital Age: The Development of IT Skills and Jobs in Kenya and Uganda, 2019, 3.

¹⁷⁷ Ibid., 4.

skills training in this area might contribute to a deepening of the disparity between skills level and quality of work. This trend further promotes informality among the highly educated and reflects a wider absence of decent quality jobs in the economy more generally.

Refugee status and the wider condition of forced displacement often negatively affects early skill-building, results in higher school dropouts, lower earnings, and increases the likelihood of ending up in dissatisfying jobs that do not match one's qualifications.¹⁷⁸ Outside refugee status, individuals have diverging capacities to upskill. Some may have important caring and work responsibilities that are difficult to square with intensive training in a bootcamp, for example. Others may be entirely unfamiliar with computers and the internet so that they must begin with foundational digital literacy. It can be a daunting challenge to move from there towards advanced skills that are competitive in the digital economy.

Digital skills programmes often implicitly promise a quick fix to these problems, suggesting that anyone anywhere in the world with a computer, internet, and time for digital learning can earn money as a programmer, web designer or remote data worker. There is a diversity of digital education providers working with youth and refugees covering a variety of skills, ranging from courses on basic digital literacy and data entry tasks to advanced software engineering. There are programmes that want to build software engineers from scratch over longer periods, so refugees can find decent work in well-paid jobs; there is ad-hoc training that merely prepares refugee workers for a single specific project of outsourced data work; and there are many shorter courses and programmes that aim to deliver the basics of a particular field of digital skills, be it how to work in e-commerce, in web design or in tech-enabled manufacturing. Overall, digital skills training becomes a crucial mediator between economically marginalized refugees and the digital economy, which tends to be highly competitive and is often only accessible for refugees through upskilling and tailored support.

Digital skills for employment and entrepreneurship in Kenya

Mercy Corps and the Moringa School found a significant skills gap in Kenya, with 30 per cent of employers identifying an inadequately skilled workforce as a major constraint to their business. This is partly due to a major disconnect between the higher education system and the private sector, "with universities offering curricula and teaching practices that are often out of sync with the needs of the job market".¹⁷⁹ Smaller training initiatives and programmes outside the formal education sector have partly picked up the slack, alongside a growth in online offerings, but it is unlikely that these can absorb large numbers of youth.

One of the most prominent training institutions in Kenya is the **Moringa School**, a multi-disciplinary learning accelerator "committed to closing the skills gap in Africa's job market by providing transformative tech-based learning".¹⁸⁰ The curriculum blends technical education with life skills development and practical experience. According to its website, the school has had more than 3,000 students and an employment rate of 85 per cent among graduates.

The school is registered with Kenya's Technical and Vocational Training Authority and teaches digital skills in two main areas: software development and data science. Both programmes are divided into Moringa Prep and Moringa Core: a five-week introduction followed by the actual course, which runs for 15 weeks

¹⁷⁸ CLS and CENDEP, Every Action Counts: Determinants of Young People's Trajectories from Education to Employment in Protracted Displacement (Beirut, 2020). https://lebanesestudies.com/every-action-counts-determinants-of-young-peoples-trajectoriesfrom-education-to-employment-in-protracted-displacement/.

¹⁷⁹ Mercy Corps and Moringa, Competing in a Digital Age: The Development of IT Skills and Jobs in Kenya and Uganda, 4.

¹⁸⁰ https://moringaschool.com/about-us.

for software development and 18 weeks for data science. Courses are taught full time. Although there are some stipends for people from marginalized backgrounds, the courses cost 200,000 shillings (about US\$1,840). According to Jedidah Akinyi, the technical lead of the data science programme,

the goal is to get course participants into work: "Once they are almost finishing the course, we have a team that reaches out to our industry partners to see if they can absorb the students into a placement, internship or paid work. We do, however, make it clear before the start on the course that it is not a promise that they will get work. Our main hope and goal is that they do get employment after."

In terms of accessibility, students generally cover an age range from 19 up to 40 years, although youth are the primary target. Most youth are in university and many of the older ones might already have a degree or diploma and are looking to change careers. Akinyi said that the programme actually has a higher percentage of women than men. He added that the school actively reaches out to "schools where students are relatively disadvantaged and then they are paid for". The stipend covers the course, food, and sometimes even housing if the students live far away so they can attend school. Prior to starting the course, they often follow a one-month ICT basic course, as some of them have never had experience on a computer. Despite these challenges, the school has an impressive record of placing graduates in employment, and students move into diverse directions after graduation. According to its own data, the school "has placed more than 95 per cent of its graduates into leading companies throughout Africa and the world".¹⁸¹

In focus: Solidarity Initiative for Refugees (Kenya)

Solidarity Initiative for Refugees (SIR) is a local community-based organization established in 2016 by a group of young refugees with the goal of using technology to equip refugees in Kakuma with the skills and tools to create a better future for themselves. The organization empowers youth in Kakuma through education access and livelihoods training using digital learning methods. Since 2016, SIR has equipped over 2,000 young refugees with skills for job linkage through partnering with organizations such as Xavier Project, Source Network and Rebank.¹⁸² According to Bahana Hydrogene, co-founder and chairman of SIR, the organization seeks to "empower youth through digital skills mentorship so that they become innovative and live a resilient life to get access to marketable opportunities, and also become self-sustainable". Some 80 per cent of the beneficiaries are refugees, and the rest are host community youth, including people with disabilities.

Skills and support

The programme is divided into four layers: learning, mentorship, freelance and social business. The learning component involves courses in basic ICT and digital literacy, programming and various online studies. The module "a good start" aims to build confidence, motivation, and a better understanding of financial literacy and business development. This initial level is also designed to ensure that refugee participants don't see themselves as a burden to society, said Hydrogene. The three-month basic ICT training then shows participants how to operate a computer, how to do research, how to create a document, how to manage data on Excel, as well as Microsoft applications. From there, participants have two pathways. One leads into advanced web development and programming, with the support of mentorship. The second pathway is that of online studies through university platforms and other resources. SIR further supports students with professional development coaching, including on how to develop a CV, write a cover letter, and build their LinkedIn accounts.

Accessibility

The programme is free of charge. The main target group is comprised of young people, primarily refugees between 15 and 34 years of age. The programme is designed to fill a gap among youth who wouldn't make it into tertiary education, according to Hydrogene. In order to be eligible, one needs to

¹⁸¹ Mercy Corps and Moringa, Competing in a Digital Age: The Development of IT Skills and Jobs in Kenya and Uganda, 13.

¹⁸² https://sirafrica.org/about-us/.

be a refugee or a member of the refugee host community. One basic requirement to getting started is that participants must be literate. For more advanced training, participants must have completed the basic training or be equally qualified.

Main challenges

Language barriers and difficulties with written and oral communication are among the main challenges. This includes English language skills and the ability to understand mentors, who are often from abroad. Another challenge, according to Hydrogene, is "female attendance and retention during the training". Some female participants join the training but are unable to complete it, due to "parental problems at home" or because of "childcare issues". A lack of budget to provide more support staff and operate a centre 24/7, so that students can independently work on their projects, is a further challenge.

From skills to work

SIR aims to go beyond teaching skills alone, providing linkages to local and global organizations and advocating on behalf of students among organizations in terms of jobs and internships. There is also a focus on encouraging remote work, as Hydrogene explained: "because we believe that in this current era of working from home there are many opportunities out there in the gig economy, and one of our objectives is to bridge that digital link between the Kakuma refugee camp and the rest of the world". Of the 2020 class of coding and web developers, 60 per cent are working, many on social media for global clients, and others are now being recruited by other organizations or are developing websites.

Bahana Hydrogene has been working online for three years and considers online freelancing to be a key source of income opportunities for graduates, saying: "When you are doing ICT you can engage in social media marketing, for example, so you just need like two weeks of coding and learning soft skills. You can also do data entry, research, web development, and these are some of the things that are out there in the digital economy."

Challenges in entering the labour market

Owing to restrictive policies affecting the mobility and work of refugees in Kenya, there are limited local employment opportunities. This is one reason why SIR focuses on the digital space, including freelance and platform work opportunities. However, this comes with its own challenges, according to Hydrogene, such as building up a portfolio at the beginning. "Experience is key so that clients are able to trust you", he said, adding that another challenge is that clients and employers are often "afraid to hire refugees". A client from the United States or Nigeria may therefore think that someone from Kakuma refugee camp will not be able to deliver, as they may ask "where will he get internet access? Where will he get a laptop?"

In addition to a range of start-up incubators and hubs, one of the more prominent ones being iHub, Kenya features a wide range of initiatives in entrepreneurial support. However, these can often be daunting to access for refugees. Instead, aspiring refugee entrepreneurs in Kenya can also use a growing transnational network called Techfugees. It is an impact-driven global organization nurturing a sustainable ecosystem of tech solutions supporting the inclusion of displaced people, operating on a global scale with local chapters in many countries. Philomena Mwangi, the Kenya chapter-lead of Techfugees, has plans to use the network to expand training opportunities among refugees in partnership with Kakuma Ventures. Techfugees Kenya also organized a hackathon in 2019. More generally speaking, while Techfugees does not deliver any specific skills-training programme, Mwangi and other volunteers "leverage partnerships that have been established through Techfugees global", as she explained. One example is that Techfugees is part of the Google for Startups Campus, giving the Kenya chapter access to resources from Google such as server-hosting, expert support and mentorship in the development of mobile applications.

Digital skills for employment and entrepreneurship in Uganda

The IT sector in Uganda is currently one of the country's fastest growing sectors, employing around 1 million people, and the demand for competent IT professionals is currently higher than the supply. As a result, many companies and employers outsource work abroad. Similar to Kenya, it is understood that universities do not offer IT skills that match market needs, despite advanced IT courses and an AI and Data Science Lab at Makerere University. The gap in market-ready ICT skills is what a variety of smaller programmes and initiatives try to fill. Uganda has some 20 tech incubation and acceleration hubs and coworking spaces, most of which are based in Kampala. This is complemented by several specialized IT training programmes in Kampala,¹⁸³ and programmes such as UNHCR's **Community Technology Access (CTA) centres.**

The CTA aims to enable refugee youth to access ICT training. "For refugees, access to ICT can be key to broadening education and livelihoods opportunities. The CTA program is an initiative to leverage ICT to deliver these opportunities to refugees and other persons affected by conflict."¹⁸⁴ The programme has three objectives: provide refugee youth with ICT skills, provide them with internet access, and offer psychosocial support. According to John Irungu, the Chairman of CTA, ICT skills that are taught include "video, coding, programming and ICT maintenance with a goal of enabling the participants to be entrepreneurs and to go out to the world and train other people". The costs for participating in training is 10,000 shillings per month (US\$2.7).

In terms of accessibility, the focus group is comprised of refugee youth between 18 and 20 years, although Irungu said that they also have basic computer training for 12- to 16-year-olds. For advanced classes, tests determine the skills level of interested participants, but basic courses do not require any pre-existing skills, although new entrants are tested to evaluate their skills level. Around 80 per cent of participants are refugees, some 10 per cent asylum seekers and another 10 per cent Ugandan nationals.

The majority of training graduates find work with NGOs in the settlements they live in, while some have started their own businesses and others have found work with international clients and employers online. "Computers are now the centre of whatever we are doing in life, including employment", said Irungu, adding: "Our aim is to introduce the young people to the digital world. (...) we just give them the skills and it is up to them to decide on what to do with that skill. It could be online work, or working as a technician somewhere."

The skills levels among participants vary, and according to Irungu, one of the main challenges they have faced has been language, saying: "There are many nationalities here and not all of them can understand English", which is the language in which the training is rolled out in. This means that training sometimes needs to be offered to specific groups in particular languages. Moreover, leaving a shielded training programme in a refugee settlement and looking for work in the wider labour market can be challenging in many ways. According to Irungu, "integrating into the host community" has been a major challenge for graduates. "Once they leave this training, which is in the settlement, they have to encounter the other world and they are taken out of their comfort zone. This can be daunting for them and some don't cope very well, let alone getting a job."

The hubs: entrepreneurial skills, acceleration, and incubation in Uganda

What digital skills programmes try to do for employment and job creation, a variety of hubs try to achieve for aspiring entrepreneurs. The lines between skills for employment and skills for entrepreneurship can sometimes be blurry, since only a small number of entrepreneurs succeed in turning their idea into a sustainable business. Many of the skills that are learned and taught at entrepreneurial hubs are therefore also to be seen as transferable skills that can be applied in the labour market. One of these hubs in Uganda is **Innovation Village**, which functions as an entrepreneurship accelerator and an incubator that

¹⁸³ Mercy Corps and Moringa, Competing in a Digital Age: The Development of IT Skills and Jobs in Kenya and Uganda, 44-49.

¹⁸⁴ https://windleuganda.org/community-technology-access/.
works alongside different stakeholders in Uganda's start-up ecosystem, including universities, the private sector and government. According to its website, "The Innovation Village aims to create an environment where start-ups can grow in confidence and capability scaling from promising tech into fully established sustainable businesses".¹⁸⁵ Part of their work is human-centred design projects to encourage problem-solving entrepreneurship, including a "Hack for Refugees" that focused on co-creating "solutions" with refugees.

Innovation Village teaches a wide range of skills in marketing, financial management, digital marketing, IT, as well as practical skills such as metal fabrication. The Research and Learning Coordinator, Hiled Mugabe, explained their approach the following way:

"When they come to us, they attend a centre where we have made a space called *motive*, where we set up different sections for skills practice for example, we have sections for mechanical engineering, tailoring and media. With the practical skills, we blend in the entrepreneurial skills so that when they go out there, they are able to run their businesses successfully and sustainably."

In terms of accessibility, the Innovation Village is funded by the Mastercard Foundation and therefore does not charge for most of its courses. Some courses that require particular external facilitators or trainers do, however, incur a small fee. The target group of their interventions are young people between 18 and 35 years. The Innovation Village targets men and women from various educational backgrounds, including those who have dropped out of formal education and those who go to university. Although the aim is to have a share of 70 per cent women, the reality does not live up to this aim. According to Mugabe, there is a special interest in "informal sector entrepreneurs who have ideas which need to be polished, also to be given skills training so that they are able to go out and do quality work and effectively compete in the job market". Their programmes also have a focus on underprivileged women who can learn practical making skills in areas such as arts, craft, and hairdressing. Refugees living in settlements are another target group.

One of the major challenges that participants of the accelerator and incubator are facing is the lack of start-up capital. As Mugabe put it: "We are training many young people, but they have been asking, 'What next? How do I put these skills into use? I need the equipment. I need the capital. I need financial support'. All these factors are still a challenge to us because we cannot satisfy the demand." Some graduates also have high expectations, hoping that once they have absorbed all the skills, they will immediately get a good job. This includes makers in areas such as tailoring, who were trained on machines and sewing machines and then expect that they will be provided with one to start up their business afterwards, according to Mugabe.

How participants can be supported to move from skills training towards entrepreneurship is a key concern, since building skills alone is rarely enough. This is why beneficiaries of the Innovation Village are sometimes placed in internships with partners, "and then they leave and go out and look for a job or compete for a job", said Mugabe, adding: "But we also offer training for those already at work so that they are able to excel or compete at the workplace by having a skill which causes an employer to want to keep an employee because he or she has skills like customer care and marketing skills".

The Innovation Village aims to prepare beneficiaries for both the local labour market and the digital labour market. The main focus is on providing them with skills "that are relevant to the job market", said Mugabe. In the sphere of tailoring, for example, most participants have either started their own workshops or are being employed in big tailoring firms that produce fabric products. "We have a big number of them currently producing the masks, as part of COVID–19 response plan by MasterCard", said Mugabe.

The second hub in Uganda covered in this research is **Hive Colab**, an open, community-owned, coworking hub for young tech entrepreneurs in Kampala. It offers digital entrepreneurs access to the internet, a quiet professional working environment to develop their ideas, hold events and generally collaborate.

¹⁸⁵ https://innovationvillage.co.ug/who-we-are/.

According to Jeffrey Luboga, a Project Manager at Hive Colab, "we are investing in young talents' ideas with time, attention, capital and highlighting their careers". Hive Colab with its partners has also focused on empowering SMEs in Northern Uganda, including in refugee settlements. Most of these businesses are in agriculture, and they are provided with training on how to run their business effectively and how to access financial institutions. "This focus on Northern Uganda is necessitated by the fact that it remains one of the economically marginalized regions of Uganda. We are trying to change that by bringing to parity with the rest of the country through entrepreneurship", said Luboga.

Besides providing the space itself, Hive Colab teaches a variety of skills needed to succeed as an entrepreneur, including, according to Luboga, entrepreneurial attitude, financial literacy, business analysis and planning, compliance, corporate governance, contracts and contract management, joint ventures, as well as things like "seven habits of highly effective people". Other skills conveyed are procurement and negotiation, quality management training, risk management and insurance, business ethics, bid management, human resources, and branding and image building. In addition to a mentorship programme, Hive Colab offers research opportunities for graduates to develop their business interests. Luboga explained: "For instance, if a student aspires to set up an education start-up, we ensure they do their research with a prominent education institution so that they can make sense of what it takes to establish and run a successful business within their industry of interest". Students with a computer science background or advanced software engineering skills are connected to experts to develop tech products and prototypes, as part of a platform called IOT – Implementation of Things.

As for accessibility, most people using Hive Colab who participate in its programmes are in university education, while some of the older ones are looking to change their careers and expand their qualifications. The basic selection criteria are that one has to be between 15 and 35 years. Luboga said that the focus for young members is to give them the "necessary skills to start looking at things from the perspective of an entrepreneur". He added: "Particularly for the adolescents, we want to provide them with an everlasting understanding of how they can actually operate a business, both present and future. The focus here is typically about opening their minds to the limitless opportunities out there." This optimistic approach is not always met by the reality afterwards, since the market in Uganda certainly does not provide limitless opportunities, while running a business transnationally online is a daunting challenge for many.

The structural deficiencies of an under-developed start-up infrastructure in Uganda are coupled with other challenges faced by aspiring entrepreneurs. Jeffrey Luboga sees "poor attitude" as one of these, which is why their first training aims at what he calls an "attitude change". He added: "Many lack confidence in discussing their ideas and their capabilities to transform them into products and services. Therefore, there is a need to inculcate a willpower to achieve dreams through attitude change among young entrepreneurs." Another more structural challenge is that government-initiated internet shutdowns and social media restrictions have affected digitally powered processes and businesses, undermining some of their plans to improve digital literacy in rural areas. Despite these challenges, Hive Colab considers many of the skills their beneficiaries learn to be transferable and important for their future access to entrepreneurial opportunities and employment. This includes soft skills such as teamwork. Many businesses have improved their sales after training at Hive Colab. "We have seen women transform grocery-vending businesses without records to enterprises with several branches and clear books of accounts", said Luboga.

Digital skills for employment and entrepreneurship in Egypt

The Egyptian government has invested heavily into digital skills provision as part of its Egypt Vision 2030. Under the umbrella of Digital Egypt, the Ministry of Communications and Information Technology (MCIT) aims to get Egyptian citizens "ready for the future and the digital transformation era". MCIT further states that it will provide training and building capacities in all segments of society, including school and university students, graduates, professionals, women, and Persons with Disabilities (PwD), in addition to "Arab and African young people".¹⁸⁶ Digital Skills and Jobs is one of three pillars of the digital Egypt

¹⁸⁶ https://mcit.gov.eg/en/Digital_Egypt.

strategy, including training in basic digital literacy, as well as intermediate and advanced skills for the labour market. The Digital Egypt Builders Initiative (DEBI) annually offers a free scholarship to 1,000 top graduate students from Faculties of Engineering and Computer Science, with p graduates receiving a professional master's degree in fields such as data science and artificial intelligence (AI), cybersecurity, robotics and automation, and digital arts. As part of DEBI, the government forged partnerships with major international technology companies, including Microsoft, IBM, Cisco, VMware, and Amazon Web Services (AWS).¹⁸⁷ One of the backbones of Egypt's public efforts to build digital skills is the Information Technology Institute (ITI). Together with these and many other digital skills initiatives that are driven by the government, there is a wide range of private sector programmes and initiatives that focus on digital skills and entrepreneurialism.

Supporting entrepreneurs with skills and capacity in Egypt is not easy, because the ecosystem in Egypt is still very young and lacks rules and procedures, said Sami Al Ahmed, CEO of the educational and entrepreneurship company Marj3: "Things operate on quite an ad hoc basis. And the biggest problem, because it's still a young ecosystem, is that it really requires relationships as the priority, which is hard to do because of how private those networks and inner circles can be." He added that this is a particular challenge for foreigners, migrants, and refugees. "How can us foreigners know about these networks if we haven't grown up in Egypt, and don't know the big names?" In most conversations in the entrepreneurship world, including in Egypt, there are barely any Arabic words spoken because the ecosystem functions in English, from the technical vocabulary to even how investors and mentors want to hold conversations, said Al Ahmed, adding: "There's the expectation that everyone needs perfect English to join this network. So for some migrants and refugees, and even some Egyptians, it makes them feel like they don't belong in that ecosystem."

However, change is underway, and the hope of leading skills facilitators and entrepreneurs in Egypt is that they are part of a new generation that will transform the system. As Al Ahmed put it: "I have a feeling there is an upcoming revolution, especially in regards to addressing the whole system of cliques and inner circle that I told you about, where only the successful get more successful and rewarded. I feel that the new cycles of entrepreneurs that are against that system will build an alternative ecosystem, and I hope to be part of it."

In focus: Information Technology Institute (ITI)

ITI is a government-led institute that provides training programmes and online learning in digital skills, including a professional training programme, code camps, alongside initiatives in freelancing and other areas of digital work. For several years now, each of the specialized programmes also has a course on online freelancing.

Accessibility

Programme information on ITI's website explicitly states that Egyptian nationality is a requirement for entry, including for the nine-month professional programme and the code camps. A certain level of school grades also appears to be a requirement, according to the website. Hany Saad, the ITI freelancing zones Technical Manager, said that both the three-month and nine-month courses are for Egyptian citizens only, "since the main target is to advance skills of our university graduates to get involved in the market quickly". The fully funded courses are also fairly competitive. Saad said that ITI receives around 15,000 applications a year but can only accept between 2,000 and 3,000 university graduates into its programmes.

¹⁸⁷ https://news.microsoft.com/en-xm/2021/02/01/ict-minister-witnesses-announcing-new-partnerships-with-major-techcompanies-within-debi/.

Skills and support

The nine-month professional programme is designed for university graduates who require a bridging programme to bring them closer to the demands of the market. Students go through various practical challenges under the support of mentorship. Successful applicants receive a scholarship. The intensive coding programmes feed the Egyptian market with some 2,000 graduates a year, according to ITI.¹⁸⁸ The Freelancing and Remote Work Initiative offers freelancing training, mentoring and information about new opportunities for youth in online freelancing and remote work. Saad, who is responsible for the freelancing course, said that it gives students input on questions such as "What is freelancing? What are the different platforms? How to you create a profile? We give them technical support by our instructors to get jobs."

Interested participants can get free online freelancing training on ITI's MaharaTech platform, learning how to get started in freelancing and remote work by exploring freelancing courses that are offered in Arabic and translated to sign language, in addition to numerous technical courses for technical specializations that are in high demand on the different freelancing platforms. ITI also offers access to free mentoring and coaching in freelancing.

Mohamed Saleh, who completed a training at ITI, said that "the good thing with ITI is that they don't bring academics to train you, they bring powerful players in the labour market so that they can really show you what the job market is about". After learning data mining and data analysis with the programming languages "R" and "SQL", Saleh considers the courses to be "very strong". Yet they also require full commitment, as he spent nine hours a day learning.

From skills to work

Saad said that over the five or six years prior to 2021, about 1,000 of former ITI trainees have been working as freelancers, some achieving earnings of more than US\$50,000 over two or three years, and at least 10 graduates being top-rated on Upwork. ITI certainly contributed its share to the "half million Egyptian freelancers with a profile on Upwork", according to Saad.

Saleh felt that ITI courses prepared him very well for future jobs. Many of the applications that he currently reviews as part of his role in a different digital skills programme on Udacity are actually from ITI graduates, suggesting that "people in the job market know what ITI stands for and the calibre of students that graduate from there". One of the major benefits of the training is its hands-on approach and the practical focus, he said, adding that he was able to apply all the skills he learnt. "So, after ITI I felt much more confident in my ability to work in the job market. And barely one month after I graduated from the training programme, that's where Udacity reached out to me about this moderator position for ITIDA programme."

He also picked up relevant soft skills at ITI, which allowed him to adapt quickly to his current work, which requires a lot of communication skills. A month after he graduated from ITI he started working with ITIDA and UDACITY, which is an online learning platform for digital technologies and skills, and soon received additional offers from several companies in the tech sector, including WE Telecom. He said: "Training at ITI really prepared me for all of this and helped me attract employers. Because this wasn't my field at all; before all these trainings at ITIDA-Udacity and ITI, I was a government employee at the Ministry of Health, but I really wanted to get into the data science sector. Now I work for Udacity two hours a day, and the rest of my time goes to WE telecom."

Challenges in entering the labour market

One of the main challenges faced by graduates of ITI's programmes who aspire to work in freelancing is "how to get the first job", according to Saad. It is tremendously difficult to obtain the few first positive ratings for jobs that will allow a worker to progress, which is why ITI works hard to provide mentorship for graduates. Sometimes they also encourage participants to start working on regional platforms such as Khamsat first, where the "jobs are easier to get".

¹⁸⁸ https://www.iti.gov.eg/iti/program-category/details/2.

While ITI focuses explicitly on university graduates, other skills training institutions aim to leverage the upskilling potential around digitalization for school-to-work transitions alongside upskilling of older youth. iSpark is a "mission-driven company that aims to build a more competent generation focusing on school students through connecting them with personal and career development opportunities".¹⁸⁹ Founded by the engineer Ahmed El Rosy, it offers training in soft skills and employability skills, helping youth between 10 and 30 years to find their career path. The idea came out of the founders' own experience of a skills gap between what they learnt at university and the requirements of the labour market. The programmes aim to reach beyond Cairo and serve marginalized governorates. Each year iSpark organizes the Traverse summit in Cairo, which hosted around 5,500 attendees from high schools last year, of whom about 70 per cent were girls.

In terms of accessibility, the only thing one currently needs to join iSpark is an internet connection, said El Rosy, adding that moving everything online during the COVID-19 pandemic has partly eased access. Moreover, all courses are free and funded by partners such as UNICEF. Most of the programmes do not require an ID, but in governorates and youth centres where they collaborate with the Ministry of Youth, students are required to register with their national ID. El Rosy added: "But for sure, if we want to work with refugees in the future, we won't put any identification requirements because we know that many don't have national IDs or paperwork. We won't make it difficult for them to access our courses." Between ITI, iSpark and other initiatives, it does seem unfortunate that most ministry-funded skill training initiatives show little flexibility when it comes to national ID requirements, thereby excluding migrants and refugees.

So far, the programmes have focused on Egyptian youth, but El Rosy said that they are willing to include non-Egyptians and disadvantaged youth, including refugees, adding: "We're very sensitive to this question of access in terms of language so we try to make it accessible to as many people as possible". iSpark faces some challenges in reaching out to potential partner organizations that can connect them with refugee communities, although they have already partnered with UNICEF in their general programmes. El Rosy expressed a particular desire to work with the ILO in the future.

iSpark prides itself with dedicated career support. The curriculum is customized based on the different age groups but generally begins by working with the students' specific interests to identify the potential careers they could pursue. Further training in professional skills can include how to write a CV, how to succeed in a job interview, as well as communication and presentation skills. There is also as selfemployment skills module that falls under the entrepreneurship pillar of the programmes. The main curriculum developed with UNICEF and the Ministry of Youth requires an investment of around 56 hours. Part of their programmes included creating opportunities for freelancing and digital skills in partnership with the US Embassy, which funded a women entrepreneurship camp implemented by iSpark. In their work with UNICEF, iSpark also held sessions with youth on how to be a graphic designer and how to develop the skills required to access job opportunities in the freelancing world. Other sessions focused on coding and computer programming. Moreover, iSpark worked with UNICEF and the Ministry of Youth in creating a portal for students to be connected with private sector opportunities, such as internships or jobs. However, El Rosy said that iSpark itself has not yet reached the stage of being able to connect students with immediate job opportunities. Although they have not been able to do a systematic impact assessment, El Rosy said that a large number of students who took courses early last year are already working, "and are very successful in their field, and they like what we do - so we do see a real impact". Graduates from entrepreneurship programmes have also successfully created companies, he said. El Rosy emphasized in the interview that iSpark tries "to make the learning as transferrable as possible to fit the labour market". Follow-up mentoring with alumni from the previous years is designed to extend the support beyond the training itself. "We don't push for any specific career; what we try to do is facilitate the choice and exposure", said El Rosy.

Despite these successes, beneficiaries of iSpark have faced significant challenges. One of these is reliable internet connection, a problem that was made worse by the need to operate fully remote since the pandemic. Another general challenge for the programme has been to find the right partner organizations in remote areas to reach out to marginalized communities. Overall, El Rosy sees a difficulty in organizing

¹⁸⁹ https://isparkegypt.com/about-us/.

the various partnerships and communication channels with relevant partners, saying: "We need an actual mapping of implementing bodies, international organizations, development agencies across governorates, and we need to ensure that relevant organizations are well connected to each other, to tap into synergies that can increase impact and reduce waste and redundancies". In the particular case of refugees, he said that they have been wanting to work on programmes with refugees for a while, but that they "don't know who is involved in different governorates; what the programmes look like; how we can tailor our content to these groups, etc. We don't even know where to begin or who to start talking to."

Initiatives such as iSpark take place against the backdrop of growing government investments into the digital upskilling of Egyptian youth. Under the umbrella of Digital Egypt Strategy, the Ministry of Communications and Information Technology (MCIT) launched the **Future Work is Digital (FWD)** initiative powered by the Information Technology Industry Development Agency (ITIDA) to equip and train 100,000 young Egyptians through ITIDA and Udacity, which is an online learning platform for digital technologies and skills to remote work and local market opportunities. FWD is an 18-month scholarship programme providing students with an integrated learning and upskilling experience that includes access to Udacity online classroom, hands-on practice projects, online support webinars, professional industry mentors, an interactive peer-to-peer community and continuous coaching.¹⁹⁰ The initiative's website lists the logos of major digital labour platforms, such as Upwork, Fiverr, Freelancer, PeoplePerHour, Guru, as well as Ureed, next to the statement: "FWD unlocks learners' potential by providing tech and business acquisition skills to compete successfully for gigs and remote work opportunities offered by the leading online marketplaces!".¹⁹¹ According to Saleh, who participated in the initiative and works as a moderator on the data science track with Udacity, said that the goal of the initiative is "to enhance the freelancing market in Egypt and to encourage the youth to join this booming market through digital skills development".

As for accessibility, one of the requirements in the programme is that participants must be at least 18 years old. Most courses and modules are taught in English, requiring a certain level of education and background. This requirement for proficient English language is one of the major challenges that students have faced in the programme. There is an option for Arabic translation in Udacity, but it "would still be difficult for someone who doesn't speak English at all", said Saleh. Aspiring participants can sign up for the "challenge" entry-level track online on the FWD website and start working on the course immediately. Professional and advanced levels require an application and an interview process to determine the level of skills, while checking applicants' qualifications and competencies. Its digital nature allows the programme to be inclusive because "there is no limit to the number of trainees", according to Saleh. The professional track "in one recent month" had some 5,000 new students, and around 10,000 students the following month, he added.

Asked about the accessibility of the programme for refugees and other migrants, Saleh said that he did not think they would be able to join because "this programme targets Egyptians primarily, it is undertaken by the Egyptian Ministry of CIT [MCIT] for Egyptian youth. I don't think non-Egyptians can join because the application requires that you fill in your national Egyptian ID number, so that the Ministry can keep track of all programme beneficiaries on their database."

Three tracks of the programme provide specialized digital skills training in the fields of digital marketing, data science, and web development. A new pilot has focused explicitly on freelancing rather than technical skills, such as how to market one's portfolio, find work, set rates and organize contracts. The entry "challenge" level of the courses lasts between 40 days and two months, according to Saleh, with an assessment at the end. The professional and advanced levels last two and three months, respectively. Graduates will have successfully completely three projects per cycle. "The value of this Udacity–ITIDA programme is that all the content is online and pre-recorded, so there's no required attendance, everyone progresses through the modules at their own pace (except for project deadlines), supported by the instructors and moderators", said Saleh. The online learning platform also has a chat for students to reach out to instructors and moderators.

¹⁹⁰ https://egfwd.com/about/.

¹⁹¹ https://egfwd.com/about/.

The school-to-work transition remains a challenge for participants. The programme does not provide work opportunities for graduates, but it aims to provide students with the tools needed to access freelancing opportunities. "Udacity–ITIDA is all about transferable skills for the labour market", said Saleh, who has completed several courses and certifications on the platform himself. One of the main gaps in the existing knowledge about freelancing training specifically appears to be a lack of information about the impact on employment, in part because freelancing success is difficult to measure. Someone might be registered with a web-based freelancing platform and even successfully completed a few gigs, but by no means does this indicate that it is a sustainable form of income generation.

Connecting refugees and Egyptian youth to digital educational opportunities and entrepreneurship

Sami Al Ahmed started **Khatwa** after his own fraught experience in trying to enter higher education as a Syrian refugee in Egypt, saying: "I realized how hard it is for non-Egyptians to understand the highereducation system". The initiative started out as a Facebook group to provide information about educational opportunities for Syrians in Egypt, initially focusing on the University of Cairo. Syrians used to be forced to pay high tuition fees upon entering higher education, but a policy change improved the situation so that refugees who graduate from high schools in Egypt have the same right to enter universities as Egyptians, while those with degrees from abroad get a 50 per cent discount, said Al Ahmed.

Soon Khatwa grew and expanded its support into the sphere of teaching refugees and migrants entrepreneurship, while partnering with NGOs to provide technical and financial support for young entrepreneurs. An event called Start-Up Syria Meet Up Cairo brought together major players in the start-up ecosystem, such as incubators, accelerators and angel investors, as well as successful entrepreneurs. As Khatwa continued, Al Ahmed eventually founded **Marj3**, a wider initiative and for-profit company with some 2.4 million monthly visits aiming to help Arab youth to explore and access educational opportunities. Al Ahmed explained:

"After three years of working on Khatwa, I saw that the problems specific to education were much larger, and were not exclusively affecting Syrians but many more migrant communities. I realized people in the Arab world struggle to access educational opportunities – whether they're Egyptian, Libyan, Tunisian, Yemeni etc. All Arab nationalities encounter those problems."

At some point he realized that they achieved the main goal with Khatwa, "that information on education becomes accessible to all Syrians. So, what's next?" He created Marj3 with two Egyptian co-founders and now operating in the whole MENA region.

Marj3 has three main products, according to Sami Al Ahmed:

- ▶ *Marj3 education* is a database about universities around the world, helping people from the region who want to study on their funds but do not have the information on applications, visas, and enrolment. "We help that person in the process from A to Z", said Al Ahmed.
- Marj3 courses is an aggregator that provides information on potential careers, competencies, and skills. The student is able to see all courses offered around the world on the platform and can compare similar courses and choose what they prefer.
- ► *Marj3 scholarship* is a database for career and educational opportunities around the world. It offers information on more than 10,000 careers and available scholarships that student can apply for.

Beyond these three core products, Marj3 offers volunteering opportunities under a "fellowship", which is an online training and internship that lasts six months. At the time of the interview in early 2021, there were 170 active interns from 14 countries who helped with content development and translation work on the platform. "And we help them in personal and professional development, connect them to future opportunities like scholarships or good employment opportunities, career guidance", said Al Ahmed, adding: "We also train on specific employability skills like CVs writing, how to present yourself and do an interview, communication/presentation skills, as well as how to prepare a scholarship application, or basic entrepreneurship skills for those who want to pursue this, how to expand your network and reach out to the right people". Other programmes at Marj3 include a high school ambassador programme for outreach, and a talented writers' programme that brings professional creative writers to students so they can develop their writing skills.

In terms of accessibility, the main databases on universities, courses, training and scholarships are available for free on the platform. Marj3 has also facilitated increased access for marginalized areas such as Upper Egypt through shorter workshops held there with partner organizations or companies. As Al Ahmed said: "We're about equal opportunities because I realized for instance during my time in Egypt that someone in Upper Egypt won't know about the available information out there or won't know how to have access to opportunities. So, we facilitate that access to those more marginalized youth so as to reduce inequities between privileged and underprivileged youth." Access to the fellowship programme is highly competitive, however, with Al Ahmed saying that they can only accept about 10 per cent of applications. He added: "Our criteria for selection focus mainly on language – being bilingual in English and Arabic to help us in translation and research. Research skills is something we can teach, but we can't teach an entire language to them, so translation skills are a must." Candidates go through five rounds of assessment and interviews.

Although there is no reliable data, Al Ahmed estimated that between 60 and 70 per cent of people go on to work directly after finishing their programmes. Some 64 per cent of all fellows are women, and more than 70 per cent of women fellows received a scholarship after graduating from the programme. Many graduates also go on to found their own start-ups, and some manage to get grants and funding. On their overall approach, Al Ahmed said:

"So the point is to develop some kind of checklist with criteria: language abilities, networking skills, CV writing and the likes, basic computer skills and internet access. And from this list, we see what people have from these skills, and what they don't, and then start training them on what they're missing, to ensure that everyone ends up with these basic skills."

Provision of these basics is seen as the foundation on which to build their support for students to develop their own path. Each person has their own needs, said Al Ahmed, and some people will prefer to become employees in big companies, others prefer to join SMEs, some prefer to work as entrepreneurs or in a tech start-up, others prefer to work as freelancers, or to continue in higher education and pursue more degrees. Another layer of support to move students from training into work is mentorship, which draws from a network of successful professionals.

Although the programme has been highly successful in many ways, aspiring students with refugee and migrant backgrounds have faced significant challenges, not least because they have long struggled to obtain a residency visa in Egypt, but Al Ahmed said that this has been eased with the government's Study in Egypt initiative. Another major challenge is the English language, because "for one to study and work anywhere nowadays you need English". The third major challenge is building a network, as Al Ahmed explained: "if you don't know the right people, your energy goes to waste, especially if you haven't grown up in Egypt and arrived like many of us Syrians in their 20s (...) networks in Egypt can be quite private or selective". The legal challenges surrounding refugees and migrants in Egypt include the absence of official work permits, which require sponsorship. Although one can enrol at university with a refugee ID, "the refugee ID technically doesn't allow one to work legally in Egypt", said Al Ahmed. Many foreign students are not allowed to work legally, but they do so anyway. Al Ahmed himself is the CEO of two companies and is still on a student visa. "So officially none of us are supposed to be working in Egypt. But thankfully no one is really focused on that issue to stop us." Although a work permit would be a formal requirement for opening a bank account or starting a company, he was able to do both without.

While Marj3 has become prominent around the Middle East for its resources on finding educational opportunities, including for refugees, some refugees in Egypt are themselves involved as educators and pass on digital skills to a new generation of youth. Jointly implemented by the Carey Institute for Global Good and Plan International, the **Tawasol: Learning Coexistence** pilot project has focused on developing the competence of Syrian refugees serving in educational spaces in Egypt. A particular focus was placed

on the development of their psychosocial and pedagogical skills. Among the knowledge and skills developed in the course were the use of technology for learning and the development and sustainability of a professional learning community. The majority of female participants in this initial pilot cohort had limited technology skills and were supported towards using digital technologies.¹⁹² The curriculum was adapted from Plan International's "Teachers in Crisis Contexts" training pack. Plan International is currently developing a next phase for a larger roll-out of the Tawasol Project.

The Carey Institute created a six-week mini-training course that was delivered virtually to Syrian refugee teachers from different areas in Egypt, including Damietta, Alexandria, Sharkeya and Giza. Each of the modules they taught as part of the project took about two weeks, focusing on aspects of curriculum development and planning as well as well-being and learning strategies. The participants discussed in online forums and were supported by a staff member of Plan International on the ground. Moreover, teachers were engaged in training around the topic of psychosocial support, facilitated by an expert who spoke with teachers about the need to provide support for pupils, many of whom faced bullying from Egyptian students, said Julie Kasper, Refugee Educator Project Manager at the Carey Institute.

One of the major challenges Syrian refugee teachers faced was technology usage. All the participants except one were women, many of whom "didn't have phones, so they were using their husbands' phones, when these were available", explained Kasper. She added that the women were very eager to participate but were limited by their lack of access to devices they could use independently. Zoom sessions were equally challenging, with the women often balancing the calls alongside caring responsibilities and other obligations, as well as coping with connectivity issues. Referring to the gender-specific aspects in the use of technology among refugees, Kasper said: "That's definitely something that needs to be held in mind for future professional learning opportunities". The pilot was pre-pandemic, meaning that some participants had never heard of Zoom before and had difficulties adapting to new technologies, or even setting up e-mail accounts.

Entrepreneurship and digital skills in Egypt: hubs, accelerators, and the ecosystem

The government-led efforts to build digital skills and entrepreneurship in Egypt are complemented by a wide range of private sector initiatives. In the field of entrepreneurship, these include various hubs such as start-up incubators and accelerators, or coworking spaces. Start-up insiders in Egypt point to several problems in the entrepreneurial ecosystem. Lenah Hafez Al-Akrami, Research Officer at the StartEgypt programme at Flat6Labs, has been exploring policy reform and did research into legal frameworks, "to understand what are the barriers and challenges in the Egyptian legal framework specific to start-ups and entrepreneurship", as she put it. One of the questions she wanted to answer is: "Why do people in Egypt, when they start securing funds, investments and grants for their start-ups, why do they register these funds offshore?" The answer is to a large extent what she calls a complex legal structure that is "unclear and confusing". Recently, the government debated a new programme that focuses on supporting SMEs, while the gap between the public and private sector is starting to close, she explained. This means that incubators and accelerators such as Flat6Labs are increasingly collaborating with government agencies and programmes. "But the pace of change is extremely slow, the bureaucracy slows everything down", she explained.

¹⁹² https://globalcompactrefugees.org/article/tawasol-digital-community-practice-egypt.

One major obstacle has been the Egyptian government's opposition to crowdfunding, which is associated with money laundering and fraud. The Financial Regulatory Authority (FRA) in Egypt has now introduced a new bill that addresses crowdfunding in FinTech. Another barrier to start-up development has been the "extensive security and background checks for any foreigner who wants to open a business in Egypt, either as an entrepreneur or an investor", according to Al-Akrami.

The former Uber and Careem official and angel investor Danya Bashir shared her insight on the main barriers of fostering entrepreneurial success in Egypt and the MENA region more generally. The first barrier she mentioned is a lack of funding opportunities in the region, and a resulting difficulty among entrepreneurs "to lift their idea or concept up and sell it to investors". Funders and investors tend to work with mature start-ups, which creates a Catch-22 situation, as she explained: "You can't get funding without the experience but you can't get the experience without funding". Other barriers become evident in the inequality of opportunity between locals who may have little international experience on the one hand, and those who speak English and may have lived abroad on the other hand. The latter tend to have a better understanding of the entrepreneurial space and easier access to capital. Bashir not only invests in promising start-ups but also mentors female or first-time entrepreneurs.

Her advice for people from potentially marginalized backgrounds, or those who are just starting out, is to "learn as much as possible, to reach out to all resources they can find to better understand how to succeed in this ecosystem". This includes a need to join programmes, training, or incubators. "Or if they're working as a waiter, or a driver, I would tell them to watch as many educational videos and online resources to be able to learn on their own", she said. The competitiveness of some incubators poses challenges, however, with some requiring competition against hundreds of others in order to secure funding, which tends to privilege upper middle-class backgrounds.

On the particular challenges for refugees, she hinted at the difficulty of working on a start-up under the challenging circumstances of being forcibly displaced, saying: "How do you ask somebody who's been living in very precarious conditions, who doesn't have access to a battery power for their laptop, to be able to afford being trained and developing themselves without receiving some financial support? It's really challenging, and pretty depressing." Despite these challenges, Egypt features a number of inclusive initiatives aimed at supporting youth and marginalized communities in developing their businesses.

In focus: StartEgypt, Flat6Labs

Flat6Labs is a seed and early-stage venture capital firm that runs start-up programmes in the MENA region. Annually, Flat6Labs invests in more than 100 innovative and technology-driven start-ups. The labs run a four-month seed programme twice a year to help entrepreneurs develop their business skills and provide them with a support environment to build their products, test market fit, improve their business models and pitch to external investors. The StartEgypt programme is Flat6Labs' preaccelerator and incubator programme, focusing on social impact initiatives. It is funded by the United Kingdom's development agency and supported by International Finance Corporation (IFC).

The social impact programme focuses on eight sectors, including education, healthcare and transportation. According to Al-Akrami, the goal is "to shed light on the connection between social impact, the Egypt 2030 Agenda and the SDGs. So we try to show people how they can contribute to those goals, and to what extent this could be a positive impact for the development of Egypt."

Skills and support

The social impact programme aims to support those who enrol through incubation "from A to Z, throughout their whole journey", said Al-Akrami. Training includes product design, customer acquisition, sales and marketing, as well as how to build a team of competent staff. Another part of the programme is financing, including how to reach out to investors. Moreover, the programme works with freelance coaches and mentors who are based in each of the governorates.

Incubation programme cycles usually last for four months, although the StartEgypt programme is different from Flat6Labs general acceleration programmes. StartEgypt's focus is on the very early stage of the start-up process, meaning that there are coaching sessions three to four times a week during after-work hours, so candidates can balance the programme with other commitments in work and family life. Flat6Lab's Cairo accelerator programme takes on mature start-ups and offers funding of up to 700,000 Egyptian pounds. Participants there work full-time on their businesses: "It's their entire life you know when you get to the point of maturation", said Al-Akrami. Moreover, there are several other complementary events alongside the incubation programme itself. These include so-called "inspire nights" where the aspiring entrepreneurs can express their need for help and training, and then receive live answers from a prominent speaker. "We bring success stories that address topics that are important to our programme participants", said Al-Akrami.

Accessibility

StartEgypt focuses on early-stage ideas. "If someone has a good idea and knows how to explain it in a structured way, and has done the research for it, he knows the market – that's the profile we accept for our programme", said Al-Akrami. After they realized that eventually many participants do not follow up with their ideas, they decided to heighten their criteria for selection, including the need for a Minimum Viable Product (MVP) with enough features to be usable by early customers. "So they need not only a prototype but a proof of concept", she said.

There is a particular focus on marginalized communities and vulnerable groups, while also ensuring that there is a good percentage of women in every cycle. Another focus is aspiring entrepreneurs from marginalized areas such as Upper Egypt and the Nile Delta. A female founders' workshop was held in governates outside Cairo. It aimed at inspiring women to join the programmes. Accessibility is further improved by an emphasis on teaching and events in Arabic, rather than English.

Challenges

One of the biggest challenges for participants is access to finance, since most investors are looking for mature start-ups. This is despite the common idea that angel investors should take risks. That StartEgypt does not provide funding poses a challenge for early-stage entrepreneurs to develop their start-ups. However, every year a StartEgypt forum allows entrepreneurs to showcase their start-ups and they can win funding of up to 200,000 pounds in a pitch competition.

Widening participation in areas such as Upper Egypt has been a particular challenge for Flat6Labs. Al-Akrami explained that the lowest number of applicants usually comes from this area, while the ideas candidates submit from there tend to be very early stage, without proof of concept. Some of their research revealed particular societal challenges affecting women, including domestic work and caring responsibilities. "A lot of them see that there are more opportunities in Cairo, so they say that they'd have to move to Cairo in order to succeed, but they can't leave their families", said Al-Akrami. Some 36 per cent of start-ups in StartEgypt are female-led, she added.

Entering the digital economy: the experience of youth and refugees

The appeal of the digital platform economy for those who stand at the margins of the local and global economy is strong. Labour platforms promise access to an income for anyone with skills, a computer and internet access, while entrepreneurial training programmes suggest that creating a business from scratch has become easier with digital technology. The suggestion that is implicit in this digital economy is that the opportunities and jobs are out there, and that it is only up to youth to harvest them. Inspired by this idea, youth and refugees across Africa are participating in the digital economy against a backdrop of governments and development actors who see them as the vanguard of a transformation towards prosperity. While the experiences of youth and refugees on the ground indeed suggest that the digital economy offers potentially transformative opportunities, they also highlight substantial barriers that continue to limit the extent to which this transformation can benefit everyone. The following section offers some insight from the perspective of youth and refugees, grounded in their lived experiences.

Summary of insight

The interviews conducted with youth and refugees who participated in the digital economy or took part in skills programmes and entrepreneurial training indicate that the reality does not always match the enthusiastic hopes attached to digital careers. This is particularly so when individuals felt they were left to their own devices, but major challenges persisted even when youth and refugees received technical and financial support. The ITC-NRC Refugee Employment and Skills Initiative (RESI) in Kenya's Dadaab and Kakuma camps, for example, has trained refugees in digital skills and connected them to online freelancing platforms. Despite major successes among some workers who generated a livelihood online, beneficiaries spoke of significant challenges, including unreliable electricity supply and internet connection, a lack of access to suitable hardware and software, exclusive ID verification requirements at platforms alongside slow government bureaucracies in renewing refugee IDs, as well as building language skills and other competencies needed to succeed. RESI staff also lamented a difficulty to build the "right mindset" among refugees who may be unwilling to take risks and invest weeks of time and efforts into landing their first few jobs. This mirrors the wider business model of platforms that classifies workers as self-employed to reduce costs and responsibility, while making them bear the risks and costs of the work process. In this sense, training for online freelancing operates with a somewhat problematic assumption that individual refugees must be willing to take on risks and pursue the goal of self-employment without the security of returns. Moreover, some refugee workers reported widespread discrimination on platforms against refugees, as well as intimidating competition.

Manual and low-skilled work for on-demand location-based platforms such as Tukole or Lynk are often easily accessible, but as the 33-year-old Congolese refugee Benjamin in Uganda explained, this line of work requires mobility and transportation. This problem was paralleled by safety concerns during the COVID-19 pandemic and a lack of health insurance and social protections.

Those who seek to step up from freelancing to become entrepreneurs also struggle to realize their dream of starting a business from a refugee camp or settlement, where basic infrastructure is lacking and the prospect of acquiring investment is often highly unlikely. We will see below that the 24-year-old Congolese refugee Rose, who lives in Nakivale settlement in Uganda, made between US\$60 and US\$90 a month selling shoes online, but needed funding and more training to grow her business.

Higher skill levels tend to mean less enthusiasm about online freelancing, while focusing on decent employment instead. The 23-year-old Egyptian woman Margret has a computer science degree from a university and participated in training at ITI, which prepared her for the job market and taught technical as well as practical skills. Yet despite this highly skilled background, she never managed to land a job on Upwork and other freelancing platforms. The only freelancing she did was through informal local networks. Her assessment of the lack of quality in freelancing encapsulates a wider problem that can be considered central to the digital platform economy: "As a freelancer, even if I am brought onto to a project with a team, each person works on their own tasks so there's no exchange, there's no soul to it you feel".

Online freelancing in Dadaab, Kenya

The Refugee Employment and Skills Initiative (RESI) by the International Trade Centre (ITC) employs tradeled and market-based solutions to foster income-generating opportunities for refugees and their hosts, helping to build self-reliance and foster economic resilience. In Kenya, RESI is jointly implemented by ITC and the NRC with the aim of developing skills and work opportunities for refugees in online freelancing and home decor sectors. RESI's freelancing project builds on the premise that online freelancing offers new opportunities to find work irrespective of location, with the main requirements being only "a stable internet connection, computer access, the right skill set and motivation".¹⁹³ In Dadaab refugee camp, Kenya, the skills training consisted of an intensive course focused on upgrading technical skills and building capacity to operate successfully on digital labour platforms such as Upwork. Online workers were then supported to upload their profiles onto online platforms and start bidding for work. The workers further gained access to three months of mentorship and coaching to assist them in working online.¹⁹⁴

In their brochure "Become an online freelancing champion: Conquering the digital market in Dadaab",¹⁹⁵ NRC and ITC appeal to potential beneficiaries by emphasizing the accessibility of online freelancing and the availability of income opportunities. They even go as far as to claim that "being an online freelancer is one of the best jobs in the world! You choose your own hours, work from wherever you like, choose your own clients, and earn money."¹⁹⁶

196 Ibid., 5.

¹⁹³ https://www.intracen.org/resi/kenya/.

¹⁹⁴ ITC and NRC, The Refugee Employment and Skills Initiative in Kenya. Rebuilding Lives through Trade: Unlocking Market Opportunities for Refugees and Their Hosts (Geneva, 2018), 8.

¹⁹⁵ ITC and NRC, *Become an Online Freelancing Champion: Conquering the Digital Market in Dadaab* (Geneva, 2018). https://www. intracen.org/uploadedFiles/intracenorg/Content/Redesign/Projects/RESI/Freelancing Brochure_v2_pages.pdf.

As well as having access to training programmes, mentoring and coworking spaces, RESI programme beneficiaries can apply to the Dadaab Collective Freelancing Agency – a collective of refugee workers acting as self-employed freelancers through Upwork and other platforms. Such an agency provides a space for mutual support and allows the bidding for larger projects that can contract a collective of freelancers. Workers pay 10 per cent of earnings to the agency, which is fully self-reliant and not dependent on funding. RESI also provided new entrants with a start-up kit that includes a laptop and other equipment, although this equipment support was discontinued for various reasons. Besides the dedicated online freelancing training, other courses also include basic and advanced computer applications (Computer Secretariat) as well as graphic and web design.



The challenges

Electricity and digital infrastructure

One of the main challenges that refugee workers in Dadaab talked about was the unreliable access to electricity and the internet. Electricity supply in the camps is generator-powered and follows a timed schedule, with no electricity being provided after 10 p.m. at night. Workers lamented that it is at nighttime in Kenya when most clients post new jobs on digital labour platforms such as Upwork, since many of these jobs originate in the United States and follow a different time zone.

The coworking spaces set up in Dadaab did not circumvent the electricity supply issues and complications resulting from differences in time zones. As Abdifatah, a Somali freelancer and mentor in Dadaab, explained:

"They created a centre where in daytime, freelancers can come together to do the work. There were accessibility problems, because maybe the watchman is never there, or he doesn't allow everyone in, or there is no internet and no power when you need it. At night, which is when we freelancers normally apply for jobs – because it is when they post the jobs in the US, in the West, [there is no electricity] so if you don't have a laptop and data bundles and internet, you have all these kinds of problems."

He further said that generators in Dadaab usually power up at 9 a.m. and pause at noon, before coming back on around 3 or 4 p.m., off again at 6 and then on again between 7 and 10 p.m. Moreover, another challenge has been that refugee online workers in Dadaab pay a significant amount for internet data fees. According to Hawa, a 25-year-old Somali worker, data can cost her up to US\$40 a month while she only made around US\$150 to US\$200 with translation work. These costs add up and undermine the benefits of online freelancing.

Hardware and software

Access to a computer and other hardware is the most basic and fundamental enabler of digital labour, yet many aspiring freelancers in Dadaab did not have a personal computer. Hawa was one of the earlier cohorts who received a laptop from RESI. However, she talked about her fears that the dependency on the gifted laptop poses some risks for her aim to remain self-reliant. "The computer I am using now might break, or something happens. I cannot afford to buy another laptop, they are very expensive in our area. (...) I fear that if my laptop breaks no one can help me and I will drop out of all the work I am doing now."

Moreover, working as online freelancers in some fields – such as translation or design – requires access to software that incurs additional costs. Especially for new inexperienced workers, purchasing licences for software can be costly. According to Aden, "when it comes to translation, we use SDL Trados – it's very expensive. Now they introduced one for freelancers, with monthly payments. I bought the 2017 one, it cost more than US\$2,000."

Identification requirements

Identification and verification of identity remains one of the main hurdles for refugees to access digital work platforms. Online workers in Dadaab are holders of Alien ID cards and Proof of Registration as refugees ("Manifest"). Although RESI managed to collaborate with Upwork towards the platform accepting these as an alternative to national identification documents, major problems persisted. As Abdifatah explained:



"Refugees do not have permanent identification, they have an alien card and this expires every five years. Sometimes a freelancer comes in and it might be that it is one to six months due from the date of expiry. They try to create an account [on Upwork], but they have a card that is about to expire. When they use that card or the Manifest to create an Upwork account, Upwork sometimes gives you a tick when you approve your qualification. So, if you use an alien card and it expires, they suspend your account or put the financial part of your account on hold. The same with banks: you open an account with a bank and if the alien card expires, they call you, and even if there is money on it, they block you. It takes more than six months and sometimes up to a year to renew the alien card. So that's a problem. Sometimes you see a freelancer who applied for the alien card a year ago and still doesn't have it."

Khasana, a refugee online worker from Dadaab, finished the training at the end of 2019 and then opened an account on Upwork, saying: "I did some jobs there, only data entry. After that my alien ID is expired, my account was suspended for three months", before she managed to renew her ID and reopen the account. It is important to note that having the alien ID accepted by a major digital labour platform is already an achievement in itself, yet despite this intervention, refugees' access to the digital economy is frequently disrupted by these ongoing problems.

Pre-existing skills

Although entry-level work on digital labour platforms, such as data entry, can be relatively accessible, the online freelancing training in Dadaab had to take certain skills into account as a precondition. According to Mercy, a RESI project assistant in Dadaab: "the main challenge now is getting the numbers. We need youths who can communicate freely, because they deal with clients outside Kenya. They need good communication skills. It restricts us to select only youths who finished high school and can communicate easily and freely. Not many of the youths have been to high school, there are many dropouts."

"The right mindset"

According to RESI programme staff, one of the major challenges has been to build a particular kind of mindset and mentality among aspiring refugee freelancers. This includes the willingness to invest time into building an online freelancing profile, even if it means that financial returns might take several weeks to manifest. This suggests that there is an expectation among some digital livelihood programmes that individual refugees are willing to take on risks and pursue the goal of self-employment. This largely mirrors the business models of major platforms, which demand unpaid labour time to be undertaken by workers to build their profile, bid for jobs, and grow a reputation. Programme staff can encourage newbies to accept even badly paid jobs in order to collect experience and build up a reputation. It can take several years for freelancers to establish themselves well enough so they can be more selective in their pricing and in the kinds of jobs they accept. It appears that a willingness to take on risks and invest unpaid labour time forms part of the mindset that is not only demanded by the platform economy, but also by training in online freelancing, funded by international development agencies and organizations.

Online freelancing in Kakuma, Kenya

Joljol is a refugee from Sudan's Darfur region who has been living in Kakuma for about eight years. He has a degree from Southern New Hampshire University in Logistics and Operations, and he has developed coding skills, web design and data analysis. He also studied business administration remotely for three years with a scholarship from the Jesuit Regis University. However, these high skills would not be of much use within the Kakuma camp he is living in, which is why he turned to Upwork for income opportunities. He explained:

"Kakuma is actually a camp, and sometimes the jobs are not enough for everyone, then there is always a lot of competition, then it is not easy to find a job that pays well. Most of the jobs done here offline, that refugees work for, are in NGOs, and the pay isn't really good. A refugee might get actually 5000 shillings a month but when you work online you can get a lot of money, you can get even more than a refugee gets while working for an NGO or something. So, what really motivated me was the availability of jobs online and the pay that it pays, so this is the main reason why I decided to choose, and see online jobs as the first alternative compared to jobs that are here."

At the same time, he acknowledged that the chances for a refugee who lacks skills to land a job on Upwork is actually very small. There is an entire skill set in freelancing that needs to be developed. Before he turned to Upwork in 2018, he frequently checked the notice boards in Kakuma for job opportunities but found it rather frustrating.

This experience was mirrored by Pricilla, a 22-year-old South Sudanese refugee in Kakuma who took part in the RESI freelancing training:

"To get a job in the camp is really hard. (...) NGOs in the camp are corrupt, let me just say that because you will write applications and everything you submit but after some days you won't be called even for an interview (...) the youths are many and they are unemployed. So if they hear there is an advert, even though there are only two positions needed there, there will be hundred applications, that's the main challenge."

JolJol did manage to run a shop in the camp and did some work as a researcher with the Agricultural Finance Corporation in Kenya. Yet his experience underlines that the availability of digital platforms does not necessarily change the political and economic marginalization of refugees in camps:

"I have never been successful in getting jobs outside Kakuma because once a job is posted like on LinkedIn, where I am active, the requirements of documents such as work permit, national passports, national ID that I don't have get me out of the fit for the position, and since then I don't have interest in jobs outside Kakuma because I know from the requirements I won't make it."

As for Upwork, since 2018 he has done about eight jobs. One of his last gigs was photography work. The process involved a lot of time investment for bidding for what he called "thousands of jobs that are posted per minute". Once he found a job for which he fit the requirements, he would submit a proposal but he found there was "a lot of competition... you have to write a very good proposal to the employer indicating the skills and the requirement that are needed for that job, and then you wait." The last job he did had ten milestones, and upon finishing each milestone, he would get a pay of US\$200, of which he received around US\$175 after Upwork's commission and the M-Pesa fee was deducted.

The refugee Pricilla, who is the eldest of ten children and must support the younger ones, also talked about the tough competition on Upwork, saying that having experience and reputation on the platform is key. She added that on Upwork, "you write 50 proposals but no client, but we are trying".

Accessibility

With the support of ITC and NRC's freelancer training, JolJol initially had no problems accessing Upwork, thanks to a collaboration between the platform and the programme.

He said that "the good thing about working as a freelancer [is that] you are not required to have a work permit, you are not required to pay taxes or you are not required to pay any obligation". But when Upwork eventually wanted all refugee workers in Kenya to be fully verified, they asked for a national ID and when he submitted his alien ID it was rejected. Only with some renewed negotiations with Upwork was it possible to have the profile reinstated.

Benefits

The pay was one of the main reasons for JolJol's enthusiasm about online freelancing, saying: "the pay is really nice, like for example US\$100 per task (on Upwork), while if you are working for an NGO here, you might work for it for two months and maybe four for you to get that. But working on Upwork, you might get that within a week, or even in less time you can get that amount of money. So this is the main benefit." He also benefited from the network effect of Upwork, whereby clients who were satisfied with his job would recommend him to someone else.

Challenges

Competition on Upwork can be fierce, in particular for new workers. In addition, JolJol appears to have experienced discrimination on Upwork for his background as a refugee, which adds additional difficulties on an already time-consuming and competitive bidding process:

"It is not always easy to get a job on Upwork, especially if you introduce yourself to an employer telling him that I am so and so, and currently living in a refugee camp, so this is when an employer learns that you are a refugee, what comes into the mind of an employer is that they start doubting you, and they might not actually believe that you might be the kind of person who can be able to deliver because they know how life in the camp is."

JolJol added that "there is a lot of discrimination", which he perceived to be so because "everybody knows that refugees lack skills, lack power, internet, food ... so there is discrimination based on one's status".

The Congolese refugee Pascal, who lives in Kakuma and completed 10 months of digital skills training in web development with the Solidarity Initiative for Refugees, found work as a facilitator with the initiative for 10,000 shillings a month. However, his efforts to earn additional income as an online worker were futile:

"I have tried to be online on freelancing platforms, Freelancer, Fiberr and Upwork, but they did not get me any single money. The experience I got from there, there are a lot of professionals, and you need to have a team, you need to kind of build a very good background before you start getting anything, or before you start getting any client, and actually it is very much competitive." Refugee online workers in Kakuma face similar infrastructural and connectivity challenges to those in Dadaab, with only generator-powered electricity, a lack of computers and smartphones. During JolJol's second job on Upwork, the client was in a different time zone, causing some serious difficulty:

"When it was night here, it was not to him, and that was our deadline, and as I was working on that project (...) before completing my laptop power went off, and I could not save or submit the project. So, I had to wait until the next day when I went to my learning institution centre to charge my laptop and share the work. I know many people who don't own laptops and do their works using their smart phones, it is hard for them to deliver."

Support and outlook

JolJol took part in the freelancing training programme run by NRC and ITC and therefore received some tailored support and mentorship to get set up at the beginning. In addition, he found that Upwork itself provides many helpful tips about how to find jobs and be successful. Most jobs he has been doing on Upwork are connected to ICT, and this adds to the building of his skill sets. With future plans to become a full software engineer, he appreciates the demand for constant learning of new skills that freelancing brings with it. Pricilla, who supports her nine siblings with her income as a teacher and online worker, dreams of becoming a social entrepreneur "who starts a business to change society".

The barriers for an aspiring entrepreneur in Kakuma

Pricilla, who took part in RESI's online freelancer training programme, aspires to create her own business. She said: "I am trying to set up a business, I want to be an entrepreneur". She talked about the many challenges she sees in doing so as a refugee based in Kakuma. One of the main challenges she identified is the absence of any capital: "Here in Kakuma, starting a business here in the camp is not that bad as long as you have capital and as long as you have identified the gap, it won't be that hard for you but the problem is, where do you get the capital to start business since it is not that easy to start up a business with no capital, it won't work at all".

Moreover, Pricilla spoke about her fears of the authorities because any businesses started by her in Kakuma may not have the required licences. Overall, she found it difficult to understand the steps she must take in order to realize her dream of running her own business from Kakuma. Saying that she is a digital marketer and a freelancer, she added that she can "do anything online", but she faces the foundational problem of unreliable internet connectivity and hardware access: "I have no computer, so even though I get any client, I won't work. It will cost me a lot to struggle, so computers are also a main problem. Okay, also networks like Wi-Fi, it is really hard for us as digital marketers to start-up and work for your own. So, it is really hard."

Working as an on-demand cleaner in Uganda

The 33-year-old refugee Benjamin must support eight family members back home in the Democratic Republic of Congo. After training with the Innovation Village (see page 66), the only job he could find was to work as a self-employed on-demand cleaner for the platform Tukole (see page 53). He describes his skill set as one that is used to "working with my hands". He said that the terms of his agreement with Tukole at the moment are a monthly payment of 200,000 shillings, or about US\$55, regardless of whether he gets a gig or not.

One of the benefits he sees in this informal platform work is that he does not need any formal identification, saying: "I feel like with other opportunities the moment they hear you are a refugee you are disqualified for the positions". However, at first Tukole required a national ID, which he didn't have, as well as a letter from the "Chairman" where he lives, which he didn't get either. Eventually they accepted a refugee attestation letter.

One of the downsides of this job is that he can be called upon on short notice, although he usually knows in advance when he is required to work. One of the main challenges he is facing is transport, since many of the locations he is cleaning at are further away. Entering other people's houses during times of COVID-19 can also be unsafe, as he explains. This risk is paralleled by the lack of health insurance and other social protection, as is common on freelancing platforms. Benjamin did not even know health insurance was an option, responding to the question of whether he has insurance: "What is that? I have not heard of health insurance nor has anyone here approached me about it. If I am sick I have to pay for the cost myself."

Working for NaTakallam in Uganda

Frederic is a 50-year-old refugee from Burundi who now lives in Kampala, Uganda, with his wife and seven children. He used to study French in Burundi and taught the language in secondary school. Before COVID-19 shut down most face-to-face contact, he also taught at a French centre in a university in Kampala. He learnt about NaTakallam (see page 86) just before the pandemic and was lucky to have this income opportunity, once his other work fell through: "At NaTakallam, I am new, I don't have many students, but NaTakallam helps me much because it came at a the time when I was without a job at university. I lost my job because of Covid. So I didn't have a regular salary, and whatever you get, it helps you manage." His work mainly focused on giving remote online language sessions and doing transcription work.

Online freelancing next to local business activity

Frederic's last payment, which came through in December 2020, was around US\$250. One transcription work he did amounted to about two weeks of work and brought in about US\$300. Asked about how this income helped him and his family get by, he said that it mostly went into food purchases and school fees. Moreover, together with his wife he started buying ingredients for a "porridge mix" that they sell to the local community. They advertise their products using digital tools such as WhatsApp groups, and sometimes they use platforms such as SafeBoda for deliveries. Combined with his income from language teaching, this business has been essential for their survival. As he explained: "When I arrived here in Uganda, it's impossible to survive without any business, because there is no job, sometimes you see, one can find work two or three hours a day, but that's not enough to survive. You have to try what you can do." Although their income from the business fluctuates, he said that they make around 55,000 to 66,000 shillings per week (US\$15 to US\$18).

The challenge of hardware and connectivity

It was indicative of the difficulties Frederic faces in working online that his connection cut out several times during the remote interview with the author. The internet connection in Kampala was not always the best, he said, adding that it was particularly bad on rainy days. On top of this, his computer was not really up to the job he was doing, and his camera did not work properly, meaning that students would always only see him as a blurry image. Transcription work was also challenging for him, because it requires frequent and time-consuming fact-checking and double-checking of names and terms on the internet.

Outlook and future goals

Frederic hoped that he can soon buy a better computer with some of the earning from his online work. His experience of working online in his own field of expertise – French language teaching – made him want to find similar opportunities for other refugees in his community with different expertise.

"Sometimes the refugees that are here they think they are not able to do something by themselves. They are not able to think in terms of innovation ... I have a job because I am a teacher. Perhaps they can create other opportunities with other competences, other options, for example, some refugees are doctors, nurses, and so on, maybe one can make these consultations online ... you are a doctor and you don't have a job but people are seeking help everywhere. Some are engineers, so if NaTakallam can help these people to use their skills and energy and competence to work and earn money, that would be great."

His goal for the future is to build something up with his wife, develop a business and "give jobs to other people" with the help of online platforms. "I want to see that the refugees, that they can be rich people too."

From training to small-scale entrepreneurship in Nakivale, Uganda

Rose is a 24-year-old Congolese refugee in Nakivale settlement, Uganda. She completed high school but could not afford to enter university. Instead, she joined an entrepreneurship and ICT skills programme with Community Technology Access (CTA) (see page 66), while improving her English along the way. Her initial expectations for the training were that they would get funding "to go and start our business to apply the training". Instead, she discovered "a passion for online work".

Together with some work as a trainer with CTA she has built up a small local business selling women's shoes, saying: "At the moment this is physical but with the skills I have learned I aspire to do it online so I can reach a wider audience". With her business she has made between US\$60 and US\$90 per month. Her current goal is to go back to school and gain a degree in computer science from university, and after that she would like to expand her business, "especially online, so that I can be fully self-employed". But in order to succeed, she said that she still required more training and some funding. She added: "I feel like the courses online that actually mean something on your CV cost a lot of money, so if I could get some scholarship if possible it would really go a long way in helping".

Digital skills and the search for employment in Egypt

Margret is a 23-year-old Egyptian who graduated from Computer Science at Minya University in Upper Egypt. As part of her studies, she participated in a three-month training in Web Development provided by the Information Technology Institute (ITI) (see page 69), which prepared her for the job market and taught technical as well as practical skills. This was necessary, Margret said, because "once we graduate, we realize that there's a huge gap between what we've learnt at university, and what the job market requires". Although computer science is becoming a popular field among young Egyptian women, the percentage of those who actually move into employment was much lower, she said, adding: "But those who are really committed to pursuing a career and a dream, they learn and struggle and sift through the mud".

Bridging university with the labour market

The ITI training also gave Margret insight and practical experience in working as a freelancer. Taking additional training that is oriented towards the labour market was very important for her, because she did not feel that university prepared her well enough for labour market entry. "The job market requires that you know how to work in a team, a skill that I hadn't developed enough at university. (...) I never learnt how to work in a team where I knew no one, how to work with different personalities, with difficult personalities."

Already during university, Margret started selling products through Facebook and took several courses in digital marketing. The course was part of the "creative academy" at university and was delivered in partnership with Udacity and ITIDA. She gained some professional experience and tried out different areas of digitally enabled work. "Because I understood that what we learn in our textbooks is not what is going to define our success in our careers, so I wanted to gain more professional experience and see first-hand what people talked about in terms of challenges and opportunities", she said.

Counter digital labour platforms

As for online freelancing, she joined Upwork and Khamsat, as well as LinkedIn, which she learnt about during the ITI training. Without the training, she said, she would have not even known "what it means to be a freelancer". Despite her initial enthusiasm about the digital labour platforms, she never actually managed to get a job. "When I started on these platforms, I would find a lot of opportunities, but I wouldn't apply because I always felt that I was missing something in terms of skills, that I wasn't ready to deal with an entire project on my own." Now that she has graduated, she mainly finds freelancing opportunities through friends and networks, working on tech-based projects for various clients.

Margret's experience provides a counter-narrative to the hype around freelancing on digital labour platforms:

"As a freelancer, even if I am brought onto to a project with a team, each person works on their own tasks so there's no exchange, there's no soul to it you feel. It's not the same as working in a team offline. So I feel that in the future I want to venture more in offline work, to benefit from working with people and add value. Right now, I feel that I am missing this aspect. (...) In Egypt there are a lot of problems for freelancers – there's no protection or insurance for freelancers. I haven't had many jobs in freelancing but from what I've experienced so far and witnessed from friends, it was be quite risky to be a freelancer in Egypt."

Her current job search focuses on getting employment as a web developer with a company in Egypt. Margret found that there has been a growing offering of free and accessible online courses in digital skills during the COVID-19 pandemic, saying that "it's actually very accessible to develop your skills in technology". She even picked up skills from YouTube videos. Now that she is looking for work, she fears that employers might not see her "real value" and potential. She is now looking at job post descriptions on LinkedIn and other platforms, identifying what is missing in her skills, and deciding what she needs to learn. "If people stop at the challenges and difficulties and just lose hope, nothing's going to change. So it's better to focus on what's available, to take advantage of the available opportunities and develop themselves from there."

Conclusion: the way forward

With a focus on Kenya, Uganda and Egypt, this report has aimed to contribute to a better understanding of the main challenges and opportunities digital platforms in Africa pose for supporting a wider transition to decent work and e-commerce, with a concentration on refugees and host community youth. The research highlighted that African governments and the international aid community invest much hope into the digital economy's potential for job creation and economic inclusion of youth and refugees. The online marketplace is often perceived to be easily accessible, while local employment alternatives outside urban centres are often scarce. The case of refugees offers a critical corrective of overly optimistic ideas about the digital platform economy as inclusive, empowering and transformative. Indeed, the current state of refugees and youth in the digital economy raises some serious concern about the absence of adequate social protection and decent working conditions. This situation is often times induced by workers being classified as self-employed on the platforms, as self-employment status lacks fundamental protection, while small-scale e-commerce such as selling and trading goods online is largely informal.

The way forward is complicated and will require new directions in thinking and action. At the heart of this complication lies a dilemma: the informal and precarious jobs in the digital platform economy are already becoming a widespread go-to option among large sections of youth and refugees in Egypt, Kenya and Uganda, but unless its fundamental principles and business models change, this upsurge in digital economic inclusion will remain inaccessible and exclusive. Since the battle to ensure more decent conditions in the digital economy through policies and legislation is both national and global, requiring a large-scale coordinated effort, the question is how the ILO and its development partners ought to approach job creation through the digital economy in the meantime. In addition to the recommendations this report puts forward, we suggest a wider rethinking of social protection and a focus on strengthening forms of intermediation and incubation in support of the digital workforce.

Incubation and intermediation as keys to digital inclusion and self-reliance

This report identifies incubation and intermediation as key pillars of future efforts to support refugees and youth within the digital platform economy, while working towards more decent working conditions and economic self-reliance.

Incubation is not only a principle of technology hubs supporting aspiring entrepreneurs and their startups so they can develop their business until it is ready to be realized, but it is also a principle that has been applied to freelancing on digital platforms more generally. An incubator's main goal is usually to produce successful and independent individuals or businesses that leave the incubator viable and freestanding.¹⁹⁷ Incubation is therefore a temporary measure of support and protection, aimed at building the capacity, skills, and knowledge needed for establishing self-reliance. The need for incubation arises from the premise that refugees and many young people in Africa face major gaps and barriers in two key transitions: the initial transition from school to work in the digital economy, and the transition from precarious digital labour to more decent and formal employment.

The first transition, which is that of ensuring access and initial inclusion into digital labour or e-commerce, can be supported by digital skills training programmes and start-up incubators, thanks to the mentorship and upskilling they provide alongside technical assistance with problems such as setting up a profile on a platform and learning how to bid for work. Incubation can be understood as layers of support between individual workers and the unregulated platform economy. An example for incubation in this sense are social impact outsourcing platforms such as Humans in the Loop, Digital Lions, Kazi Remote, or LevelApp, because they aim to protect cohorts of workers from open competition externally, for example by negotiating favourable pricing on their behalf, while supporting them internally with training, insurance and mentoring. Strengthening incubation as a principle of supporting and protecting vulnerable workers from the competition and risks associated with the digital platform economy will be crucial for facilitating digital economic inclusion and the transition to economic self-reliance.

However, the current situation offers reasons for concern that any contribution to the inclusion of refugees and marginalized youth into the digital platform economy ultimately results in precarious and poor working conditions. Currently, even the most supportive and impact-oriented platforms and social enterprises largely mirror the indecency and precarity that define the platform economy at large. Social enterprises and aid-funded initiatives that match digital refugee workers with buyers of such work must find ways to become financially sustainable without burdening workers with commission fees as high as 30 or 50 per cent. If the business model of social impact platforms that support and incubate refugee workers is only viable through financing its operational costs by taking a major cut from workers' earnings, then these businesses effectively act as a private agency that contravenes the ILO's Private Employment Agencies Convention, which stipulates that agencies shall not charge "directly or indirectly, in whole or in part, any fees or costs to workers".¹⁹⁸ Moreover, these social impact platforms and freelancing agencies should aim to classify workers as employees with access to social protection, and they must find ways to break with the widespread misclassification of digital workers as self-employed "freelancers".

Intermediation is linked to incubation and can be understood as facilitating transitions into and within the digital economy where there would otherwise be insurmountable barriers, while actively mediating some of the risks and challenges the platform economy involves. Digital skills-training institutions are not only intermediaries that ideally create a passage from school to work, but they should also actively mediate and transform the student's capacity to engage with the digital economy and advance within it.

¹⁹⁷ Rudy Aernoudt, "Incubators: Tool for Entrepreneurship?", in *Small Business Economics* 23, 2 (2004): 128. http://www.jstor.org/ stable/40229350.

¹⁹⁸ C181 – Private Employment Agencies Convention, 1997 (No. 181), Article 7, https://www.ilo.org/dyn/normlex/en/f?p=NORML EXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312326.

Moreover, impact-driven freelancing agencies and social impact outsourcing platforms can act as mediators that not only link up individual workers with projects they source from clients, but they also offer training and mentorship, even if they largely fail to generate decent working conditions. While any digital labour or e-commerce platform acts as an intermediary between workers and clients, or sellers and buyers, this widespread intermediation largely benefits the platform rather than the workers and is largely responsible for the misclassification of workers as self-employed "freelancers" without social protection. There is thus a need to mediate between the intermediaries or platforms, and the workers, in order to restore some of the deficits and risks the business models of digital labour and e-commerce platforms inscribe into digital livelihoods.

Strengthening forms of incubation and intermediation that benefit workers and entrepreneurs, while ensuring decent conditions and access to social protection, will be crucial in facilitating the two fundamental transitions that are necessary to improve the development outcomes of inclusion in the digital economy. The first of these transitions is the initial inclusion of youth and refugees in the digital economy: the transition from un- or underemployment to digital employment and livelihood generation. The second transition aims to transform indecent and precarious digital labour and informal business towards formal and decent conditions. Without efforts in incubation and intermediation, both these transitions are unlikely to succeed for most beneficiaries, and digital inclusion will leave many of the most marginalized youth and refugees behind, while subjecting those who aim to succeed to a risky game of "survival of the fittest" in a competitive transnational marketplace. The 46 interviews we conducted with a variety of actors, including digital platforms and skills training providers, highlighted that outcomes of digital economic inclusion are best where mediation or incubation are the strongest and where individual youth and refugees are protected and supported to advance and succeed.

However, one of the main challenges of this approach is sustainability in that the goal of incubation and mediation is for refugee workers to become self-reliant and to reduce dependence on support mechanisms, with transition to , and decent work being at the core of these efforts. The problem of start-up incubators that often lead only to actual investments and funding for the best few, while leaving many others behind, exemplifies this problem. This problem of dependence also becomes clear when social impact outsourcing platforms suddenly lose their major partners and clients after having provided livelihoods for hundreds of refugees and host community youth. This not only leaves workers who may have relied on the income in a highly precarious situation, but their incubation also means that they are less likely to succeed as individuals, since the projects they worked on were always sourced through the mediating platform. This highlights the need to prioritize sustainability across time in any future interventions that employ a logic of incubation or mediation.

Rethinking protection

Many of ILO's key Conventions and Recommendations, including on fundamental principles and rights at work, are applicable to all workers, irrespective of their contractual status: "irrespective of whether platform workers are classified as employees or as self-employed, they should enjoy the right to associate, to bargain collectively, and to be protected against discriminatory conduct and unsafe workplaces. They should be provided with health and safety protection and social security and be guaranteed a range of other key rights at work."¹⁹⁹ Meeting these standards should be a priority in future interventions that seek to include refugees and youth into the digital platform economy.

The specific political and economic context of refugees complicates the practical application of international labour standards, including those related to social protection in the immediate future, since many refugees have historically been confined to informal economies without many of the privileges that citizens and other workers enjoy. In many host countries, refugees do not have the unconditional right

¹⁹⁹ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 248.

to work or start a business and therefore do not usually have their claims for better working conditions recognized by governments. Any effort to address protection gaps in the digital economy among refugees must therefore be coupled with a process of improving their access to labour rights more generally. At the same time, there may be a need to rethink protection in new creative ways, alongside the more formal policy-level process that aims to work towards a better understanding of how working conditions and employment relationships are governed for refugees in the platform economy. Identifying underlying principles of support and protection that are already practised across the many efforts in using the digital economy for job creation and entrepreneurship seems crucial, because future interventions will need to rethink protection along new lines until larger reforms and progress have been achieved. In the space of refugees' economic activity where conventional mechanisms of social protection, such as trade unions or national insurance schemes, are widely absent, a key question is how can decency and formality be applied within a digital economy in the face of these inherent limitations. The research behind this report identified several prototypes for rethinking protection that are especially relevant for refugees and other marginalized segments of the population.

- Algorithmic fairness and distribution of work. Some platforms, such as the location-based ondemand platform Lynk in Kenya, run algorithms for work allocation that take needs into account, for example by prioritizing workers who have had fewer work offers than others. Innovating blueprints for fairer algorithms that allocate work and match clients with workers should be a priority for future action. This also includes the way in which work is allocated and distributed among workers on freelance and microtask platforms, which should be as equitable as possible.
- Social dialogue, collective bargaining and freedom of association. All workers, including platform workers, enjoy the rights to organize and engage in collective bargaining and platform workers can associate in a broad variety of organizational forms. Basic principles of social dialogue, ie. negotiations between worker and employer organizations, have yet to emerge substantially in the digital platform sector and are not been applied for refugee platform workers. Local organizations such as the Dadaab Collective Freelancing Agency offer some level of support for individual workers on labour platforms, while being able to negotiate with platform operators to reduce access barriers.
- Intermediation and brokerage. Social impact platforms and worker cooperatives such as Digital Lions and Humans in the Loop acquire clients, negotiate pricing and distribute work fairly across individual workers. Until platforms classify workers as employees, or until national law imposes such a classification, alternative intermediary organizations could step in to employ them and act as a kind of intermediary cooperative vis-à-vis the platform. Research on worker cooperatives that support and effectively employ freelancers found that these can offer workers the "collective capability to reduce the various forms of uncertainty affecting them", including income instability and a lack of access to benefits and social security.²⁰⁰ These types of social impact and cooperative organizations can engage further with worker organizations and continue act as a buffer between the digital marketplace and the workers. However, this support and mediation does come at a cost, with commissions charged to workers' earnings by social impact platforms ranging from 10 to 50 per cent.
- Fair work principles. While the ILO and international efforts such as the Fair Work Foundation are pushing for more decent working conditions in the digital labour platforms, few platforms have explicitly committed themselves to fair work policies. Where they do, as in the case of social enterprise Humans in the Loop, these policies not only create a blueprint for fair conditions but also set a replicable precedent that can be adopted elsewhere.
- Insurance schemes. In the absence of employer contributions to social protection among many platform workers and informal entrepreneurs, there is a need to fill the gap by establishing insurance schemes that individual refugee workers and entrepreneurs can link into. This includes the need for access to social security coverage, healthcare and sickness benefits during periods of ill health, and income support in the event of unemployment and loss of earnings. Greater state intervention and cooperation with major development partners is needed to guarantee the human right to social security in the digital economy.

²⁰⁰ Julien Charles, Isabelle Ferreras, and Auriane Lamine, "A Freelancers' Cooperative as a Case of Democratic Institutional Experimentation for Better Work: A Case Study of SMart-Belgium", in *Transfer: European Review of Labour and Research* 26, 2 (1 May 2020): 157–74. https://doi.org/10.1177/1024258920919686.

- Mentorship. Many digital skills initiatives and some e-commerce and digital labour platforms offer access to mentorship by experienced professionals, thereby offering an opportunity to rethink mentorship on a large scale as a key pillar of support. This could be further developed and institutionalized with the help of funding.
- Match-funding for entrepreneurship. A lack of investment into small start-ups is a major obstacle for entrepreneurial success across the three study locations, suggesting that schemes that offer matchfunding and other incentives for investment are urgently needed.
- Business formalization. Some e-commerce platforms have a deepening involvement in the management of small informal businesses, offering resources that support them in fulfilling basic requirements for a formal business, such as bookkeeping. There is an opportunity to use the influence and reach of online marketplaces to engender transitions from informal to formal entrepreneurship.

Recommendations

The following set of recommendations are based on the research conducted for this report under the multi-stakeholder PROSPECTS partnership, aiming to inform future interventions in using digital labour platforms for creating income-generating opportunities among youth and refugees. While the study focused on Kenya, Uganda and Egypt, most of these recommendations are applicable beyond these specific country settings. Apart from the specific recommendations emerging from this report, it is important to reiterate the main recommendations put forward by the ILO's World Employment and Social Outlook 2021 on digital labour platforms. The report calls for a process of regulatory dialogue and coordination to ensure that domestic laws implementing the fundamental principles and rights at work as well as other key legal provisions, such as occupational safety and health and social security, apply to all workers, including workers on digital labour platforms. Other recommendations put forward by the ILO concern the correct classification of workers' employment status, fair payments and working time standards, non-discrimination, dispute resolution processes, and data protection.²⁰¹

The specific context of refugees and the varying legal and political regimes that govern their access to work and human rights has implications for the kind of interventions and actions that are needed to ensure their protection in the digital platform economy. One of the main challenges that workers face in the platform economy is their frequent classification as self-employed independent contractors. As legislation on refugees' right to work varies significantly from country to country, the question over the employment relationship is complex. This is exemplified by the problem that in some cases, for example where refugees' right to work in the local labour market is restricted, digital labour platforms are seen as alternative sources of livelihood generation precisely because they are informal and unregulated. In the face of their restricted access to employment in the labour markets of host countries, together with widespread experiences of discrimination, many refugees and asylum seekers view home-based online work as a viable alternative that is somewhat invisible to the national authorities. Even if this is not entirely true in practice, it remains a widespread perception. This perception is not a recommendation to undermine existing regulations which call for the adherence and application of relevant labour standards to all platform workers, on the contrary, this needs to be the end goal. The solution to this conundrum is progressive legalization of refugee work and decent work conditions for platform workers.

²⁰¹ ILO, World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work, 249.

The following recommendations are addressed to national and international policymakers, including governments and international organizations, social partners, as well as digital platforms and the private sector. One realization from the research behind this report is that different stakeholders and actors on the stage of digital economies are not as well connected as they could be. This problem has many aspects, which include platform operators lamenting the fact that they would like to reach out to refugee communities, but simply do not know the right partner organizations to do so. Another example is the position taken by some major global labour platforms that they would be willing to take refugees on board and reach out to their communities, if only African governments supported them by verifying their IDs so they can comply with the rules that oblige them to do so. These and other examples underline the need for stronger collaboration between governments, digital platforms, workers' organizations, and organizations in the field of international development and humanitarian aid, among other actors.

Multi-stakeholder recommendations

Improve refugees' access to a universally accepted legal identity and to financial services, thereby aiming to remove barriers around ID verification and payment mechanisms on digital platforms and in training programmes.

- Remove all legal impediments and administrative barriers for refugees seeking to access digital platforms or digital skills training programmes, such as national ID documents being a prerequisite for access.
- ► Facilitate collaboration between digital platforms and governments to address the barriers that ID verification and payment mechanisms on platforms pose for refugees and other non-citizens.
- Explore alternatives to dependency on US-based digital infrastructures and service providers, such as online payment providers, which often exclude entire nationalities owing to political sanctions and force platforms to comply with stringent KYC requirements.
- Replicate successful mobile money economies, such as Kenya and Uganda, in countries and regions where mobile money is underdeveloped.

Prioritize investment into the digital upskilling of youth and refugees in digital literacy and in demand-oriented skills for work and entrepreneurship in the digital economy.

- Expand the provision of digital skills training both within and outside traditional TVET institutions, with particular attention to serving marginalized regions and populations, including refugees.
- Connect digital skills training with direct and immediate work or internship opportunities, which can be sourced through partnerships with both public and private employers.
- Efforts in upskilling should further be complemented by additional mentorship and career development support during and after the completion of training, to be provided by public services and by the private sector.

Deepen partnerships between digital platforms, governments and the international development and humanitarian sectors, with the aim of creating new mechanisms that drive the inclusion of marginalized groups while improving protection mechanisms in the digital platform economy.

- In working towards this aim, build on support and social protection mechanisms that are already trialled in practice, while innovating new approaches that can contribute to more decent and safe working conditions.
- Work towards an internationally recognized set of norms and principles that address the specific needs and vulnerabilities of refugees in the digital platform economy, alongside their inclusion in wider efforts to ensure fundamental rights and decent conditions for all workers.

Governments

Extend labour rights and social protection to all platform workers, including refugees.

- Ensure that the employment status of workers on digital platforms is correctly classified and is in accordance with national classification systems.
- Ensure adequate social security benefits for all workers, including platform workers and refugees, by extending and adapting policy and legal frameworks where necessary.
- Work towards the provision of fair payments, clearly defined working time standards, and income protection for all platform workers.
- ▶ Work towards ensuring that self-employed platform workers enjoy the right to bargain collectively, for example through greater harmonization of competition law with labour law.

Expand and accelerate current investments into the improvement of ICT infrastructures, including in rural areas and in refugee settlements and camps.

- Ensure that ICT infrastructures do not exclude refugees and people living in marginalized or remote areas, for example by connecting remote areas or refugee camps and settlements to internet cables, mobile internet networks, and the electricity grid.
- Consider the introduction of subsidized data bundles and internet subscription plans for poor citizens and refugees who use the internet for livelihood generation.

Prioritize equipment and improve access to computers and other hardware among refugees and disadvantaged youth.

- Establish IT-enabled workspaces and community centres evenly across regions and areas, including in refugee settlements and camps, by collaborating with the international development and humanitarian sectors, and with private sector tech companies.
- Develop schemes that can provide those who seek digital livelihoods with access to private computers and other hardware, in part by collaboration with major technology companies and major aid funders.

Social partners: workers' and employers' organizations

Social partners can extend support to companies and workers who engage refugees or who work in areas affected by forced displacement issues

- Related to but also beyond the digital platform economy, the business environment and working conditions of refugees can be improved with increased access of worker and employer organizations to camp and other refugee settings.
- Implement training and sensitization programmes so that refugees understand their rights at work in the digital and other sectors.
- Work closer with humanitarian and refugee support organizations to improve understanding of labour standards and regulations that affect refugees.

Promoting the benefits and expanding inclusion of digital labour platforms

- Increasing refugee knowledge and skills on accessing digital platforms including on topics of marketing, pricing and other entrepreneurship concepts; basic and advanced digital skills; and knowledge about the most relevant digital employers.
- Reaching out to refugee groups which may be particularly suited for digital platform work such as young women at risk of violence or discrimination, or disabled youth, for example those who face mobility challenges.

Improve understanding of the benefits of social dialogue, both nationally and locally

- The understanding of social dialogue concepts and practice in refugee hosting areas is often low, providing an opportunity for employers and workers organizations to combine forces for advocacy. This can be achieved by involvement of the ILO and its workers and employers groups, in important humanitarian policy channels like the UN Roadmap for Digital Cooperation, UNHCR Digital Private Sector Group and the African Union Digital Transformation Strategy.
- Social partners can consider establishing partnerships with so-called "platform cooperatives" and "social impact platforms", which are new cooperative business models that can help in attaining economies of scale, and enable access to skill development, savings, credit and insurance schemes.

The international development and humanitarian sectors, including international organizations and their in-country partners

Develop new interventions that facilitate transitions from precarious work and informal entrepreneurship in the digital economy towards decent, secure and formal employment and business.

- Collaborate with national governments, workers' and employers' organizations and the private sector to create programmes and initiatives that lead to decent employment both in the local and online labour markets.
- Work towards facilitating the recognition of skills that workers acquire in the digital platform economy to make them transferable into other sectors of the economy, in part by collaborating with governments and TVET institutions.
- Establish collaboration with e-commerce platforms and governments that can facilitate the transition from informal to formal enterprises, in part by incentivizing entrepreneurs to register their business and by removing legal and administrative obstacles in opening a business, including for refugees.

Complement wider efforts to safeguard the fundamental rights of workers in the platform economy with a parallel process of innovating new social protection and support mechanisms for workers and entrepreneurs in the digital economy.

- Strengthen and widen existing support mechanisms for workers in digital livelihood programmes, start-up incubators, training initiatives and on social impact platforms.
- Systematically analyse and further develop existing mechanisms that support workers within the digital economy and contribute to improved conditions, such as fair work policies, mentorship schemes or fairer designs of algorithms.

Widen the funding opportunities and technical assistance that is available to social impact platforms and social enterprises that have a dedicated aim of supporting youth and refugees to earn a living in the digital economy.

- Support social impact platforms and providers of digital livelihoods that have a social impact mission with financial and technical support to ensure durability and sustainability.
- Provide technical assistance to existing social impact platforms and online work initiatives, with the goal of promoting and adopting decent work standards and fair work policies.

Integrate target populations into the design of future interventions and programmes, following a bottom-up human-centred approach to programme design and innovation.

Engage and include refugee platform workers in governance, implementation and evaluation efforts related to the digital economy, including by applying concepts of "meaningful youth engagement".

Engender public discourse on the study's findings and drive further analysis on its implications for future interventions in the field of job creation through the digital economy.

Commission follow-up initiatives that translate some of these broader recommendations into actionable objectives and concrete outcomes on decent work in the digital economy. This could include expansion of ILO programmes such as the "My First Digital Job" programme, and the ILO-ITU "Boosting decent jobs and enhancing skills for youth in Africa's digital economy" joint programme.

Digital labour and e-commerce platforms

Implement better working conditions and social protection that comply with international labour standards including on fundamental principles and rights at work, while prioritizing the inclusivity of platforms to all.

- Apply the appropriate classification of workers so that they receive the required social protection and security, while seeking new solutions and partnerships that can contribute to addressing protection gaps affecting refugees.
- Rethink the design of platforms in ways that prioritize inclusion for all, with particular attention to measures that would enable refugees and other marginalized populations to access work and entrepreneurship opportunities.
- Address the barriers that current business models impose for workers from marginalized backgrounds, for example ensuring that workers are not charged different types of fees for accessing work and commission fees on incomes earned, which is contrary to the ILO's Private Employment Agency Convention.

Offer payment options that work for refugees and unbanked populations.

- Find more inclusive alternatives to current electronic payment infrastructures that enforce compliance with international sanctions against certain nationalities, in part by addressing these problems in partnership with governments and international organizations.
- Work towards removing the categorical exclusion of certain people due to restrictive ID verification and KYC compliance requirements, in part by cooperating with governments and international organizations in establishing a universally accepted digital identity.

Increase funding and investment opportunities for early-stage start-ups and informal businesses.

- Provide match-funding and additional securities to incentivize investors and major international development funders to support the sustainability of start-ups among youth and refugees.
- Support current programmes that can mitigate the personal and financial risks individuals take in their entrepreneurial journey, including through mentorship, incubation, and formalization.

Bibliography

3RP. 2020. *Regional Refugee and Resilience Plan in Response to the Syria Crisis 2020/2021: Egypt.* https:// reliefweb.int/report/egypt/egypt-3rp-regional-refugee-resilience-plan-response-syria-crisis-20202021.

Aernoudt, Rudy. 2004. "Incubators: Tool for Entrepreneurship?" In *Small Business Economics* 23,2: 127–35. http://www.jstor.org/stable/40229350.

Awad, Atif. 2019. "Economic Globalisation and Youth Unemployment – Evidence from African Countries." In *International Economic Journal* 33, 2 (3 April): 252–69. https://doi.org/10.1080/10168737.2019.1604787.

Azu, Nnanna P., Gylych Jelivov, Osman Nuri Aras, and Abdurrahman Isik. 2020. "Influence of Digital Economy on Youth Unemployment in West Africa." In *Transnational Corporations Review* (1 December 2020): 1–9. https://doi.org/10.1080/19186444.2020.1849936.

Bayram, Ahmad Sufian. 2018. Entrepreneurship in Exile: Insights into Syrian Refugees Startups in Host Countries. https://ahmadsb.com/book/entrepreneurship-in-exile/

Behrendt, Christina and Quynh Anh Nguyen. 2018. "Innovative Approaches for Ensuring Universal Social Protection for the Future of Work." Lo Future of Work Research Paper Series. Geneva. https://www.ilo. org/wcmsp5/groups/public/---dgreports/---cabinet/ documents/publication/wcms_629864.pdf.

Betts, Alexander, Louise Bloom, Josiah Kaplan, and Josiah Naohiko (eds). 2016. "Refugee Economies." In *Refugee Economies: Forced Displacement and Development*. Oxford: Oxford University Press.

Betts, Alexander, Naohiko Omata, and Olivier Sterck. 2020. "Refugee Economies in Kenya." Oxford. https:// www.rsc.ox.ac.uk/publications/refugee-economies-inkenya

Burning Glass and BHEF. 2020. *The New Foundational Skills of the Digital Economy: Developing the Professionals of the Future*. https://www.burning-glass.com/wpcontent/uploads/New_Foundational_Skills.pdf

Caribou Digital Publishing. 2015. *Digital Lives in Ghana, Kenya and Uganda*. https://www.cariboudigital.net/wp-content/uploads/2015/12/Caribou-Digital-Digital-Lives-in-Ghana-Kenya-and-Uganda.pdf

----. 2019. Platforms and Livelihoods in Sub-Saharan Africa — Learning Advances in Digital Finance. https://www. financedigitalafrica.org/2020/04/24/platforms-andlivelihoods-in-sub-saharan-africa/ Casswell, Jenny. 2019. *The Digital Lives of Refugees: How Displaced Populations Use Mobile Phones and What Gets in the Way. GSMA*. https://www.gsma.com/ mobilefordevelopment/wp-content/uploads/2019/07/ The-Digital-Lives-of-Refugees.pdf.

Chacaltana, Juan, Florence Bonnet, and Vicky Leung. 2019. *The Youth Transition to Formality*. Geneva. https:// www.decentjobsforyouth.org/wordpress/wp-content/ uploads/2019/11/Edit_EF_Youth-transition-to-formality-17-April-2019_DJY-format_rev_DS-1.pdf.

Charles, Julien, Isabelle Ferreras, and Auriane Lamine. 2020. "A Freelancers' Cooperative as a Case of Democratic Institutional Experimentation for Better Work: A Case Study of SMart-Belgium." In *Transfer: European Review of Labour and Research* 26, 2 (1 May): 157–74. https://doi.org/10.1177/1024258920919686.

CLS and CENDEP. 2020. Every Action Counts: Determinants of Young People's Trajectories from Education to Employment in Protracted Displacement. Beirut. https:// lebanesestudies.com/every-action-counts-determinantsof-young-peoples-trajectories-from-education-toemployment-in-protracted-displacement/.

Decent Jobs for Youth. n.d. *6 Youth Transitioning to the Formal Economy.* https://www.decentjobsforyouth.org/ wordpress/wp-content/uploads/2017/08/Thematic-Plan-6-Youth-transitioning-to-the-formal-economy.pdf.

Doorn, Niels van, Fabian Ferrari, and Mark Graham. 2020. *Migration and Migrant Labour in the Gig Economy: An Intervention*. https://papers.srn.com/sol3/papers. cfm?abstract_id=3622589.

El Shenawi, Nagwa. 2017. "Digital Economy ... How Are Developing Countries Performing? The Case of Egypt." In *Diode*. https://diodeweb.files.wordpress. com/2017/11/egypt-digital-economy-actions.pdf.

European Commission. 2019. *Human Capital: Digital Inclusion and Skills. Digital Economy and Society Index Report 2019.* Brussels.

Fox, Louise, Philip Mader, James Sumberg, Justin Flynn, and Marjoke Oosterom. 2020. *Africa's 'Youth Employment' Crisis Is Actually a 'Missing Jobs' Crisis. Brookings.* https://www.brookings.edu/research/africas-youthemployment-crisis-is-actually-a-missing-jobs-crisis/

Friederici, Nicolas, Michael Wahome, and Mark Graham. 2020. *Digital Entrepreneurship in Africa: How a Continent Is Escaping Silicon Valley's Long Shadow*. Cambridge, MA: MIT Press. Genesis Analytics. 2018. Evaluation of Impact: The Rockefeller Foundation's Digital Jobs Africa Initiative. https://www.rockefellerfoundation.org/report/ evaluation-impact-rockefeller-foundations-digital-jobsafrica-initiative/

Genesis Analytics and Mercy Corps. 2019. *Towards a Digital Workforce: Understanding the Building Blocks of Kenya's Gig Economy*. Nairobi. https://www.mercycorps. org/sites/default/files/2020-01/Youth_Impact_Labs_ Kenya_Gig_Economy_Report_2019_1.pdf

Gillwald, Alison, Onkokame Mothobi, Ali Ndiwalan, and Tusu Tusubira. 2019. "The State of ICT in Uganda." Policy Paper Series No. 5 After Access. Cape Town. https:// researchictafrica.net/2019_after-access-the-state-of-ictin-uganda/.

Gregg, Melissa, and Rutvica Andrijasevic. 2019. "Virtually Absent: The Gendered Histories and Economies of Digital Labour." In *Feminist Review* 123, 1 (1 November): 1–7. https://doi.org/10.1177/0141778919878929.

Hackl, Andreas and ILO. 2021. *Digital Refugee Livelihoods and Decent Work: Towards Inclusion in a Fairer Digital Economy.* Geneva. https://www.ilo.org/global/topics/ labour-migration/publications/WCMS_785236/lang--en/ index.htm.

Hargittai, Eszter. 2002. "Second-Level Digital Divide: Differences in People's Online Skills." In *First Monday* 7, 4. https://doi.org/10.5210/fm.v7i4.942.

Hunt, Abigail, Emma Samman, and Dina Mansour-Ille. 2017. *Syrian Women Refugees in Jordan: Opportunity in the Gig Economy?* London: ODI. https://odi.org/en/ publications/syrian-women-refugees-opportunity-in-thegig-economy/

ILO. 2016. "Technological Changes and Work in the Future: Making Technology Work for All." Future of Work: The Centenary Initiative. Geneva. http://www.ilo. org/global/topics/future-of-work/WCMS_534201/lang-en/index.htm.

----. 2018. *Care Work and Care Jobs for the Future of Decent Work*. Geneva. https://www.ilo.org/global/ publications/books/WCMS_633135/lang--en/index.htm

----. 2019. Work for a Brighter Future: Global Commission on the Future of Work. Geneva. https://www.ilo.org/ wcmsp5/groups/public/---dgreports/---cabinet/ documents/publication/wcms_662410.pdf.

----. 2021. World Employment and Social Outlook: The Role of Digital Labour Platforms in Transforming the World of Work. Geneva. https://www.ilo.org/global/research/ global-reports/weso/2021/WCMS_771749/lang--en/ index.htm

---. n.d. Youth Employment Opportunities in Kenya's Digital Economy. ILO, and UNHCR. 2018. *Market Systems Analysis: Egypt: Market Systems Analysis for Syrian Refugees in Egypt.* https://www.ilo.org/empent/areas/value-chaindevelopment-vcd/WCMS_649835/lang--en/index.htm

ITC. 2020. *Business and Policy Insights: Mapping e-Marketplaces in Africa*. Geneva. https://www.intracen. org/publications/Mapping-eMarketplaces-in-Africa/

ITC and NRC. 2018. *Become an Online Freelancing Champion: Conquering the Digital Market in Dadaab.* Geneva. https://www.intracen.org/uploadedFiles/ intracenorg/Content/Redesign/Projects/RESI/ Freelancing Brochure_v2_pages.pdf.

----. 2018. The Refugee Employment and Skills Initiative in Kenya. Rebuilding Lives through Trade: Unlocking Market Opportunities for Refugees and Their Hosts. Geneva.

ITU. 2020. Boosting Decent Jobs and Enhancing Skills for Youth in Africa's Digital Economy. itu.int. https://www. itu.int/en/ITU-D/Regional-Presence/Africa/Pages/ projects/2020/jobs-skills.aspx.

----. 2021. Digital Trends in Africa 2021: Information and Communication Technology Trends and Developments in the Africa Region 2017–2020. https://www.itu.int/en/ myitu/Publications/2021/03/29/08/47/Digital-Trends-in-Africa-2021

Kässi, Otto and Vili Lehdonvirta. 2018. "Online Labour Index: Measuring the Online Gig Economy for Policy and Research." In *Technological Forecasting and Social Change*, 137: 241–48. https://doi.org/10.1016/j. techfore.2018.07.056.

KNBS. 2020. *Quarterly Labour Force Report: Quarter 3 July – September 2020.* Nairobi. https://www.knbs. or.ke/?p=5798

MCF. 2019. *Digital Commerce and Youth Employment in Africa*. https://mastercardfdn.org/wp-content/ uploads/2019/03/BFA_Digital-Commerce-White-Paper_ FINAL_Feb-2019-aoda.pdf.

Melampy, E. 2015. *Online Outsourcing: How Can Developing Countries Benefit?* https://csisprosper. com/2015/06/18/online-outsourcing-developingcountries-benefit-job-market/

Mercy Corps and Moringa. 2019. *Competing in a Digital Age: The Development of IT Skills and Jobs in Kenya and Uganda*. https://www.mercycorps.org/sites/default/ files/2020-01/Publication_IT_Skill_Gap_Report_April1_ VF.pdf

Ng'weno, Amolo and David Porteous. 2018. *Let's Be Real: The Informal Sector and the Gig Economy Are the Future, and the Present, of Work in Africa.* https://www.cgdev.org/ sites/default/files/lets-be-real-informal-sector-and-gigeconomy-are-future-and-present-work-africa_0.pdf. OECD. 2020. "A Roadmap toward a Common Framework for Measuring the Digital Economy". Report for the G20 Digital Economy Task Force. https://www.oecd.org/sti/ roadmap-toward-a-common-framework-for-measuringthe-digital-economy.pdf

OECD and AU. 2021. *Africa's Development Dynamics: Digital Transformation for Quality Jobs*. https://www. oecd-ilibrary.org/development/africa-s-developmentdynamics-2021_0a5c9314-en

Republic of Kenya. 2019. *Digital Economy Blueprint: Powering Kenya's Transformation.* https://www.ict. go.ke/wp-content/uploads/2019/05/Kenya-Digital-Economy-2019.pdf

Rizk, Nagla. 2017. *A Glimpse into the Sharing Economy: An Analysis of Uber Driver-Partners in Egypt.* https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2946083

Rizk, Nagla and Kamel Sherif. 2013. "ICT and Building a Knowledge-Based Society in Egypt." In *International Journal of Knowledge Management* 9, 1: 70-90. https:// www.researchgate.net/publication/263735519_ICT_and_ Building_a_Knowledge_Society_in_Egypt

Robinson, Laura, Jeremy Schulz, Hopeton S. Dunn, Antonio A. Casilli, Paola Tubaro, Rod Carveth, Wenhong Chen, et al. 2020. "Digital Inequalities 3.0: Emergent Inequalities in the Information Age." In *First Monday* 25, 7. https://journals.uic.edu/ojs/index.php/fm/article/ view/10844

Rockefeller Foundation. n.d. *Digital Jobs in Africa: Catalyzing Inclusive Opportunities for Youth.* https:// www.rockefellerfoundation.org/wp-content/uploads/ Catalyzing-Inclusive-Opportunities-For-Youth.pdf.

Rushworth, Philip and Andreas Hackl. 2021. "Writing Code, Decoding Culture: Digital Skills and the Promise of a Fast Lane to Decent Work among Refugees and Migrants in Berlin." In *Journal of Ethnic and Migration Studies*. https://doi.org/10.1080/1369183X.2021.1893159 S4YE. 2018. *Digital Jobs for Youth: Young Women in the Digital Economy.* Washington. https://www.s4ye.org/sites/default/files/2018-09/S4YE%20Digital%20Jobs%20 for%20Youth_0.pdf

Tondo, Lorenzo. 2020. "Uber Eats in Italy Investigated over Alleged Migrant Worker Exploitation." In *The Guardian*, 13 October. https://www.theguardian. com/world/2020/oct/13/uber-eats-in-italy-underinvestigation-for-alleged-exploitation-of-migrantworkers.

Tsan, Michael, Swetha Totapally, Michael Hailu, and Benjamin K. Addom. 2019. *The Digitalisation of African Agriculture Report 2018–2019.* https://cgspace.cgiar.org/ handle/10568/101498.

Tsibolane, Pitso, Jean-Paul W Van Belle, and Selina Linda Mudavanhu. 2018. "Digital Gig Work in Africa: An Exploratory Survey." In *Improving African Livelihoods with Digital Information and Technology*. https://www. researchgate.net/publication/327596883_Digital_Gig_ Work_in_Africa_An_Exploratory_Survey.

UNHCR. 2020. *Global Trends: Forced Displacement in 2019.* https://www.unhcr.org/5ee200e37.pdf.

----. 2021. Uganda Policy Brief: Using Socioeconomic Data to Promote Employment Solutions for Refugees in Uganda. https://www.unhcr.org/5fe31b2b4.pdf.

UNHCR and Social Performance Task Force. 2016. Serving Refugee Populations: The Next Financial Inclusion Frontier. https://sptf.info/images/RefugeeWG-Serving-Refugee-Populations-Guidelines-FSPs-Lene-Hansen.pdf

World Bank. 2020. "Digital Solutions in a Time of Crisis." *Uganda Economic Update*, 15th Edition. https:// openknowledge.worldbank.org/handle/10986/34078.

Zetter, Roger and Heloise Ruaudel. 2016. *Refugees' Right* to Work and Access to Labor Markets – An Assessment. KNOMAD. https://www.knomad.org/publication/ refugees-right-work-and-access-labor-marketsassessment-part-1
Appendix: List of selected digital platforms in Kenya, Uganda and Egypt

The following list covers major digital labour and e-commerce platforms that operate in the three study locations of Kenya, Uganda and Egypt. Additional mapping provides an overview of digital skills-training providers for employment and entrepreneurship, government initiatives, as well as additional initiatives and programmes. This list is by no means exhaustive, although it is designed to provide a useful resource for any future design and planning of interventions and partnerships. Where platforms and other actors are covered in more detail in the report, a page number for reference to the respective section is included.

Name	Type and service	Description	Page in report
Jumia Food	Food delivery	Delivers food and drink in some ten African countries	✓ page 58
Bolt and Bolt Food	Ride-hailing and food delivery	A major international delivery and ride- hailing platform	✓ page 50
Uber and Uber Eats	Ride-hailing and food delivery	A major international delivery and ride- hailing platform	
Careem	Ride-hailing	A vehicle-for-hire company based in Dubai and a subsidiary of Uber. It operates in over 100 cities in 15 countries, including the Middle East, Africa, and South Asia regions.	✓ page 50
FixChap	On-demand work services	A digital platform through which clients can book repair requests and get connected to verified handymen within their locations	
Glovo	Delivery of food and other consumer goods.	An app-based delivery platform for food and other purchases from supermarkets to pharmacies and florists	
LoriSystems	Logistics and coordination	A logistics and coordination platform that connects cargo owners to various transportation services. With headquarters in Nairobi, it operates in Kenya, Uganda, Rwanda, Tanzania, South Sudan and Nigeria.	
Online web-based plat	tforms		
Upwork	Web-based digital labour platform	A major US-based global freelancing platform, with workers having earned some \$2.3 billion in 2020 across more than 10,000 skills in over 90 categories of work	✓ page 42
Freelancer	Web-based digital labour platform	A major Australia-based global freelancing platform with more than 53 million registered users and more than 20 million jobs posted	
Fiverr	Web-based digital labour platform	A major Israel-based global freelancing platform that registers workers across more than 160 countries offering digital services in more than 400 categories.	
Truelancer	Web-based digital labour platform	A major India-based global freelancing platform offering services in a wide range of categories	

Transnational platforms and initiatives

Guru	Web-based digital labour platform	A major US-based global freelancing platform with more than 4 million registered users	
PeoplePerHour	Web-based digital labour platform	A major UK-based global freelancing platform that connected over 1 million clients to workers	
CloudFactory	Web-based digital labour platform	A digital labour platform for AI annotation, computer vision, data and language processing	
Crowdsource Africa	Microtasking and crowdsourcing in Africa	A crowdsourcing and micro-tasking platform focused on the African market	
ProZ	Web-based freelancing platform for translators	A long-standing freelancing platform specializing in translation services	✓ page 43
Recruitment and job-m	atching platforms		
Shortlist	Recruitment and job-matching	A recruiting and job-matching platform for highly skilled talent	✓ page 45
Andela	Recruitment and job-matching	An online recruiting company for engineers	
E-commerce platforms			
Jumia	Online marketplace	Africa's leading e-commerce platform, incorporating the online marketplace, Jumia Food, Jumia Production services, and other products	✓ page 58
Afrikrea	Online marketplace	A marketplace for fashion and handicrafts with African origins	
Jiji	Online marketplace	An online marketplace for buying and selling goods and classifieds	
Marketplace Africa	Online marketplace	An online marketplace for selling handicrafts, which requires that products be of African sourcing and production and that 70 per cent of the value of the goods should be added in African countries	
Made51	Online marketplace for refugee products	A UNHCR-led online site for shopping refugee-made goods, such as jewellery, dolls and masks	
TrueTrade Africa	Online marketplace for farmers	A social enterprise providing smallholder farmers with a reliable route to market and fair prices for their produce	
		*	

Country-specific platforms

Platforms in Kenya

Name	Type and service	Description	Covered in report?
Lynk	On-demand work services	Provides employment opportunities for informal workers and artisans by connecting them to clients, while ensuring fair working conditions. Through its website and Pro App platform, Lynk matches households' and businesses' labour demand with the supply of verified professionals.	✓ page 52
Fundis	On-demand work services	Pools jobs for informal workers such as carpenters, painters, plumbers, electricians, and so on, to households and businesses	
GetBoda	On-demand logistics and couriers	An on-demand logistics company used by some of Africa's largest e-commerce platforms, including Jumia	
Amitruck	Trucking and shipping	An app-based trucking and shipping service that connects customers with independent truckers	
Sendy	Transport, delivery and logistics	An end to end transport logistics service for businesses and deliveries for e-commerce, with an app-based on-demand booking service for deliveries. Drivers require a national ID or passport, a valid driver's licence, a GPS enabled Android smartphone, alongside proof of vehicle ownership and insurance to join.	
Web-based free	lancing platforms		
Cloud Factory Kenya	Crowdworking platform with a social impact mission	A web-based freelancing platform for AI annotation, computer vision, data and language processing	
KuHustle	Web-based digital labour platform	An online freelancing platform that sources projects across the globe and uses skilled African freelancers to deliver the jobs. It has more than 32,000 registered workers, many of whom are part of vetted pools clients can recruit from	
Digital Lions/ Learning Lions	Online outsourcing with a social impact mission	Digital Lions is a Fair Trade digital outsourcing agency, working with youth in Kenya. They are part of Learning Lions, which operate in Turkana – students are equipped with IT and media skills and are then encouraged to become entrepreneurs	✓ page 54
Daproim/ StepWise	Business process outsourcing	They offer outsourcing services in a variety of fields, such as web design, transcription, data mining, and more	
Job-matching a	nd recruitment platforms		
Duma Works	Recruiting and job-matching platform	It specializes in providing talent for businesses, offering an "automated matching solution" with more than 100,000 users, some 250 clients and over 4,000 job matches, according to its website	
Fuzu	Job-search and career platform	A website for jobs, insight into the East African job market, tailored career advice and skill training	
Brighter Monday	Job-search and career platform	A job website that also offers resources for improving applicants' skills and knowledge	

E-commerce plat	E-commerce platforms			
Kilimall	Online marketplace	Operating in Kenya, Uganda and Nigeria, it connects merchants and consumers via an e-commerce marketplace		
Masoko	Phone and internet hardware marketplace	An e-commerce platform powered by Safaricom. They focus on selling genuine, guaranteed phone devices and internet accessories that can be delivered within three hours.		
Sky.Garden	E-commerce for retailers	An SaaS mobile commerce platform for African retailers that enables retailers to sell online by providing webshops, marketing platform and delivery infrastructure	✓ page 59	
Sokowatch	E-commerce for retailers	An online platform that enables informal retailers to order products via SMS or mobile application, making it easier for shopkeepers to source goods and manufacturers to ensure products are available to consumers.		

Platforms in Uganda

			Covered in
Name	Type and service	Description	report?
Little Cab	Taxi	An app for on-demand taxi and cab services	
Simba Food	Food delivery	An app for food delivery	
Spesho Taxi	Taxi	An app-based taxi and transport service based in Kampala	
Jumia Food Uganda	Delivery	The food delivery wing of Jumia	✓ page 58
Tukole	On-demand work services	Operating in Kampala and surrounding areas, it connects workers in manual fields of work to local clients, including in plumbing, electrical work, carpentry, and the beauty sector	✓ page 53
Web-based freelan	cing platforms		
KuHustle	Web-based digital labour platform	An online freelancing platform that sources projects across the globe and uses skilled African freelancers to deliver the jobs. It has more than 32,000 registered workers, many of whom are part of vetted pools clients can recruit from.	
LevelApp (Refunite)	Online freelancing for refugees with social impact mission	It has connected refugees and host communities in Uganda to online freelance work in the field of image annotation. It had more than 28,000 users before the COVID-19 pandemic.	✓ page 55
Job-matching and r	recruitment platforms		
Fuzu	Job-search and career support platform	A website for jobs, insight into the East African job market, tailored career advice and skill training	
Ugandajob.com	Job-search and career support platform	A website for job searches and career training offered in partnership with Funzi.	
BrighterMonday	Job-search and career support platform	A job website that also offers resources for improving applicants' skills and knowledge.	

E-commerce platforms			
Alebaro	Online marketplace	A marketplace for trade agents, wholesalers, retailers, manufacturers and SMEs engaged in the import and export business	
Ugamall	Online marketplace	An online shopping marketplace.	
Nampya Farmers' Market	Online marketplace for farming	Bridging gaps in food and market security among farmers through an organized digital platform that works as an agri-food marketplace	✓ page 60
Agro Supply	E-commerce for farming	An agricultural input provider that has developed a mobile layaway platform enabling farmers to save money for farm input using their mobile phones	✓ page 61
Smart Farming	E-commerce for farming	An online supermarket for certified farm input	✔ page 61

Platforms in Egypt

Name	Type and service	Description	Covered in report?
SWVL	Ride sharing and on-demand bus services	A bus vehicle-for-hire, ride-sharing company based in Cairo, with operations in more than five countries. It operates buses along fixed routes and allows customers to reserve and pay for them using an app.	
Talabat (formerly Otlob)	Delivery	Belongs to Delivery Hero and runs under the Talabat sub-brand in the MENA region	
PinkTaxi	Taxi for women	Egypt's women-only taxi service operating primarily in Cairo, founded to counter threats of sexual harassment affecting Egyptian women	
ElMenus	Delivery	An online platform with a comprehensive restaurant directory that includes menus, photos, reviews, dish ratings	
Careem	Тахі	A major ride-hailing platform in the Middle East that has become a subsidiary of Uber.	✓ page 47
Web-based free	lancing platforms		
Al7arefa	Web-based digital labour platform	A freelance and remote work marketplace with thousands of self-employed workers and remote employees	
Ureed	Web-based digital labour platform	A freelancing platform with a focus on Egypt and the Middle East that runs in the Arabic language. Initially launched as a marketplace for translators and writers, it has since expanded the categories of its services to include a variety of skill sets and fields of work. It had some 65,000 registered workers in 2021.	✓ page 47
Inploy	Web-based digital labour platform	An Egyptian freelancing platform specializing in the national market.	✓ page 48
FreelanceME	Web-based digital labour platform	An online platform that matches workers and employers. The platform is supported by UNDP, the Ministry of Youth and Sports, and Microsoft. It appeared to be inactive at the time of writing.	
Khamsat	Web-based digital labour platform	A major Arabic-language freelancing platform for microservices and various forms of online work.	

E-commerce platforms				
Opensooq	Online marketplace	An online marketplace in Egypt and the wider Arab world for selling and buying pretty much anything		
MaxAB	Online marketplace	Egypt's leading wholesale food and grocery B2B ordering app	✓ page 58	
GoodsMart EG	Online marketplace	An app for household shopping and delivery		
Job-matching a	nd recruitment platforms			
Wazayef	Job board	A leading job board in the Middle East		
Jobzella	Job board and career services	Provides an "all-in-one career service" for jobseekers and professionals. The website aims to build professional networks, establish CVs, find jobs, while offering training courses, educational certificates, self-assessment tools, or career consultation.		
Wuzzuf	Job board	A job website specialized in developing recruitment solutions for employers		

Digital skills training and other selected initiatives and actors

► Kenya

			Covered in
Name	Type and training	Description	report?
StepUp.one	Skilling and job-linking platform working with camp-based refugees in Kenya	Reskills refugees on marketable skills and connects them to opportunities that pay, with a focus on social media marketing and web design. The initiative cooperated with UNHCR and has an aim to expand into other refugee camp settings around the world.	
Refugee Employment and Skills Initiative (RESI)	Digital skills training and online freelancing support	ITC's Refugee Employment and Skills Initiative (RESI) partnered with the NRC to provide innovative, trade-led and market-based solutions to create jobs and generate income for refugees and their host community. A main aspect of the initiative has been to train online freelancers in refugee camps and connect them to income opportunities on labour platforms.	✓ page 79
Moringa School	Digital skills training and careers	Courses to provide skills and knowledge that meet current market demands. The curriculum aims to empower learners with technical and soft skills for long-term success in employment, entrepreneurship or further education. Courses include software development and data science.	✓ page 63
Tunapanda Institute	Skills building	A US-based non-profit organization operating in East Africa. With the goal of training disadvantaged young people, various free courses in technology, design and entrepreneurship are offered to increase the chance of graduates in the labour market.	
iHub	Start-up incubator	A prominent innovation centre in Kenya that has supported over 450 start-ups over the years, while building a community of technology entrepreneurs	

Ajira Digital Program	Digital skills training and online freelancing careers	A government initiative driven by the Ministry of ICT, Innovations and Youth Affairs to empower over 1 million young people to access digital job opportunities. It offers skills training for online jobs, access to work opportunities, as well as access to ICT infrastructures such as hubs and centres.	✓ page 31
Kenya Youth Employment and Opportunities Project, World Bank	Skills training and capacity- building	The programme was funded by the World Bank in 2016 and ran for five years with the aim of supporting 280,000 Kenyan youth to increase their employment and earning opportunities	
Young Africa Works Kenya, Mastercard Foundation	Skills training and entrepreneurship support	A public-private partnership between the Mastercard Foundation, the private sector, and the Government of Kenya. The initiative aims to support 5 million young Kenyans to access dignified and fulfilling work. The programme supported the expansion of the Ajira Digital Programme and Moringa School, while working with TVET institutions in Kenya.	
Techfugees Kenya	Local chapter of global Techfugees network	An impact driven global organization nurturing a sustainable ecosystem of tech solutions supporting the inclusion of displaced people. With local chapters in many countries around the world, Techfugees fosters entrepreneurship and tech-driven change among refugee communities.	✓ page 65
Government pr	ogrammes and actors		
Ministry of ICT			
Ministry of ICT	Ministry	Kenya's Ministry of Information and Communication Technology	✓ page 24
Information and Communication Technology Authority	Ministry National Authority		✓ page 24
Information and Communication Technology		Communication Technology A Kenyan government-owned corporation tasked with rationalizing and streamlining the management of all the ICT functions of	 ✓ page 24 ✓ page 5
Information and Communication Technology Authority Digital Economy Blueprint,	National Authority	Communication Technology A Kenyan government-owned corporation tasked with rationalizing and streamlining the management of all the ICT functions of the Government of Kenya A framework to improve the ability of Kenya and Africa to leapfrog economic growth. The document is hinged on five pillars: Digital Government; Digital Business; Infrastructure; Innovation-Driven Entrepreneurship and Digital Skills and	
Information and Communication Technology Authority Digital Economy Blueprint, Ministry of ICT Kenya Vision	National Authority Strategy	Communication Technology A Kenyan government-owned corporation tasked with rationalizing and streamlining the management of all the ICT functions of the Government of Kenya A framework to improve the ability of Kenya and Africa to leapfrog economic growth. The document is hinged on five pillars: Digital Government; Digital Business; Infrastructure; Innovation-Driven Entrepreneurship and Digital Skills and Values. The national development blueprint that highlights the development of ICT as a priority. Vision 2030 aims to transform the country into a globally competitive, middle- income country offering a high quality of life for all citizens by year 2030. IT-Enabled Services (ITES) is a core economic pillar in Vision 2030, being implemented by the Ministry of Information, Communications	
Information and Communication Technology Authority Digital Economy Blueprint, Ministry of ICT Kenya Vision 2030 Constituency Digital Innovation Hubs and Pasha	National Authority Strategy Strategy Digital infrastructure and	Communication Technology A Kenyan government-owned corporation tasked with rationalizing and streamlining the management of all the ICT functions of the Government of Kenya A framework to improve the ability of Kenya and Africa to leapfrog economic growth. The document is hinged on five pillars: Digital Government; Digital Business; Infrastructure; Innovation-Driven Entrepreneurship and Digital Skills and Values. The national development blueprint that highlights the development of ICT as a priority. Vision 2030 aims to transform the country into a globally competitive, middle- income country offering a high quality of life for all citizens by year 2030. IT-Enabled Services (ITES) is a core economic pillar in Vision 2030, being implemented by the Ministry of Information, Communications and Technology. These centres are being set up across the country to bridge the rural-urban digital	

Huduma Whitebox Program	Entrepreneurship support for public sector	An initiative of the Government of Kenya through the Ministry of ICT and the ICT Authority, geared towards catalyzing the successful growth of local ventures to global, world-class status. The main objective of this initiative is to create a channel for anyone who wants to sell or suggest a product or idea to the government; priority will be given to products that focus on the Big 4 Agenda and address government priorities and challenges.	
-------------------------------	---	---	--

Uganda

Digital skills and entrepreneurship training				
Name	Type and training	Description	Covered in report?	
Outbox	Innovation and training hub	Based in Kampala, Outbox helps new and upcoming African entrepreneurs interested in using technology to build high-growth companies with coworking space, business incubation and technical training programmes.		
Hive Colab	Innovation and incubation hub, and coworking space focused on youth tech entrepreneurs.	An open, community-owned, coworking hub for young tech entrepreneurs in Kampala that offers digital entrepreneurs access to the internet, a quiet professional working environment to develop their ideas, hold events and generally collaborate.	✓ page 67	
Makere Innovation and Incubation Center	Incubation and Acceleration Hub	At Makere University, the centre offers business incubation for technology- enabled ideas and innovations from universities and SMEs across all sectors. They partner with the National ICT Initiatives Support Program (NIISP) by the government of Uganda.		
Innovation Village	Entrepreneurship training and support	Helps entrepreneurs to grow their skills and businesses. The Village teaches a wide range of skills, including marketing, financial management, digital marketing skills, IT skills and practical skills like metal fabrication.	✓ page 66	
Community Technology Access (CTA)	Skills training and computer labs	UNHCR's initiative meant to leverage ICT to deliver tech-related opportunities to refugees. CTAs provide basic computer training classes and an internet café, which is run by the community.	✓ page 66	
Ministry of ICT and National Guidance	Ministry	Initiator of the Digital Uganda Vision with various past and ongoing collaboration with development programmes and UN agencies		
National Information Technology Authority- Uganda (NITA-U)	National authority	An autonomous statutory body established under the NITA-U Act 2009, to coordinate and regulate IT services in Uganda		
Uganda Communications Commission	Regulatory body	The government regulatory body of the communications sector in Uganda		

National Planning Authority (NDP III Digital Transformation programme)	National authority and strategy	UNCDF worked with the National Planning Authority (NPA) and the Ministry of ICT and National Guidance to mainstream digitalization into the third National Development Plan (NDP III). The NDP stipulates Uganda's medium-term strategic direction, development priorities and implementation strategies.	
Digital Uganda Vision	Strategy	A national policy and strategic framework that reviews, integrates, consolidates and improves all the existing ICT strategies, policies and plans into one overarching digital Vision for Uganda by providing a unified direction for ICT development and an Integrated ICT project implementation approach	✓ page 5

Egypt

Digital skills and entrepreneurship training			
Name	Туре	Description	Covered in report?
Information Technology Institute (ITI) Egypt	Digital skills training	A leading digital skills training institution, ITI partnered with SAP in training young professionals for digital careers. The Mahara- Tech ITI platform offers free online trainings for freelancing as well as access to mentorship.	✓ page 69
Digital Egypt Youth Training Program	Digital skills training	The programme is provided by the National Telecommunication Institute, with training in fields such as business information systems, electronics and engineering, IT and more.	
Information Technology Industry Development Agency (ITIDA), Technology Innovation and Entrepreneurship Center (TIEC)	Start-up incubation and training	TIEC supports the development of technology- based start-ups early on and in later stages, through an incubation programme, business support, and access to technology innovation labs in cloud, mobile and electronics.	✓ page 35
Tawasol digital community of practice	Digital skills training with a focus on refugee educators	A pilot that developed the competencies of Syrian refugees serving in educational spaces in Egypt. It offered knowledge and skills development in courses, including the use of technology for learning and the development and sustainability of a professional learning community.	✓ page 74
Khatwa	Educational opportunities and scholarships	An independent, non-political and non-profit network which works side by side with civil organizations to support Syrian youth in Egypt looking to enrol in higher education.	✓ page 73
Marj3	Educational opportunities and scholarships	A platform based in Egypt that offers a directory of educational opportunities and scholarships for students in the Middle East, while also offering its own fellowship programme	✓ page 73
Startups Without Borders, Cairo	Entrepreneurship support	It aims to gather a community of refugee and migrant entrepreneurs who are getting their start-ups off the ground, to share resources, ideas, advice and opportunities to help them launch and develop their start-ups.	
Entreprenelle	Entrepreneurship support	An Egyptian social development and business impact organization that mainly aims to support local women economically by educating, training, and linking them to all the possible entrepreneurship resources	

StartUp Syria	Entrepreneurship support	It hosted the first-ever meetup for Egypt- based Syrian entrepreneurs in Cairo in 2018 and has continued its work to support Syrian entrepreneurs in Egypt since then	
iSpark	Youth career development	The company aims to build a more competent generation focusing on school students by connecting them with personal and career development opportunities, programmes on skills and career development, and training for entrepreneurship	✓ page 71
Flat6Labs, StartEgypt	Startup incubation and training	A seed and early-stage venture capital firm that runs start-up programmes in the MENA region. Annually, Flat6Labs invests in more than 100 innovative and technology-driven start-ups. The StartEgypt programme is Flat6Labs' pre-accelerator and incubator program, focusing on social impact initiatives.	✓ page 76
Government prog	grammes and actors	'	
Name	Туре	Description	Covered in report?
Ministry of Communications and Information Technology (MCIT), Egypt	Ministry	MCIT is Egypt's leading government actor in the field of ICT	✓ page 6
Information Technology Industry Development Agency (ITIDA)	Government agency	MCIT launched ITIDA as an executive IT arm in 2004 to stimulate, orchestrate and spearhead the process of developing the Egyptian IT industry	
Ministry of Youth and Sports	Ministry	The ministry has been directly involved in digital skills initiatives in the ICT sector, including through the Digital Egypt Builders Initiative	✓ page 35
Tawar w Ghayar initiative ("Develop and Change")	Government-led initiative	Founded in 2016 to focus on ICT-related youth employment. The programme, which was initiated by and continues to be supported by Microsoft, focuses on building the capacity of government agencies to provide quality skilling and employability services for young people in Egypt.	✓ page 35
Fekretak Sherketak ("Your idea, Your company")	Government-led initiative	A nationwide initiative created under the auspices of the Ministry of Investment and International Cooperation (MIIC). Its aim is to support and accelerate the growth of Egyptian entrepreneurs to develop innovative businesses in today's competitive economy.	
Rowad 2030 ("Entrepreneurs 2030"), Ministry of Planning, Monitoring and Administrative Reform	Government-led initiative	A government-led initiative that aims to enable youth to set up their own businesses, as well as to support the role of entrepreneurship in developing the national economy	
Digital Egypt Builders Initiative, MCIT	Government-led initiative	An initiative launched by MCIT, focusing on empowering the next generation of Egyptian young graduates of engineering and computer science colleges to become leaders at the global level and be capable of implementing the Egypt digital vision. The initiative offers scholarships to some 1,000 top graduates each year.	✓ page 35
Future Work is Digital (FWD) initiative, ITIDA		Powered by ITIDA to equip and train 100,000 young Egyptians through ITIDA and Udacity, which is an online learning platform for digital technologies and skills to remote work and local market opportunities. FWD is an 18-month scholarship programme.	✓ page 72

Other relevant initiatives			
Egypt Ventures – Investing in Youth	Startup investor	A firm focused on empowering the entrepreneurial ecosystem by investing in venture capital firms, accelerators and high growth enterprises.	
Algebra Ventures	Venture capital fund	One of Egypt's leading venture capital funds that has backed some of Egypt's most successful technology start-ups	
RiseUp Summit	Tech summit	A digital summit for start-ups, investors, and tech entities	
Silicon Waha	Ecosystem	It was created to spread science and technology parks across second tier cities in Egypt, with a vision to reach out to Egypt's talented youth everywhere and provide the ecosystem that enables them to create value through entrepreneurship. It offers workspaces, labs, training centres, and more.	
Smart Village	Hi-tech district	A hi-tech business district and the largest gated business community in Egypt accommodating multinational and local companies, governmental and financial authorities, as well as other organizations	

Selected transnational and regional initiatives

Name	Туре	Description
Digital Jobs Africa, Rockefeller Foundation Initiative	Digital employment	It seeks to impact the lives of 1 million people in six African countries by catalyzing sustainable ICT-enabled employment opportunities for African youth who would otherwise be deprived of such opportunities. The initiative spans seven years and leverages significant funds and support from other stakeholders with a US\$83 million budget.
Mercy Corps Youth Impact Labs	Digital employment	Catalyzed by funding from Google, they identify and test creative, technology-enabled solutions to tackle global youth unemployment, accelerating job creation so that every young person has the opportunity to find dignified, purposeful work. Focusing on vulnerable youth aged 15 to 35, Youth Impact Labs operates in two strategic regional hubs, serving the Middle East and East Africa. The focus is on preparing jobseekers for the market, creating work opportunities by engaging employers and supporting job creation platforms, as well as contributing to an enabling ecosystem.
MakeIT in Africa	Entrepreneurship support	Implemented by the German development agency GIZ, it works in close collaboration with corporate and financing partners, social enterprises, hubs and networks, to support the growth of an enabling environment for young entrepreneurs in the digital sector to facilitate better access to finance, markets and skills. The country focus is on Kenya, Ghana, Tunisia, Nigeria, and Rwanda.
Young Africa Works, Mastercard Foundation	Employment	A public-private partnership between the Mastercard Foundation, the private sector, and the Government of Kenya. The initiative aims to support 5 million young Kenyans to access dignified and fulfilling work.
eTrade For All	Multi-stakeholder initiative on e-commerce	The initiative emerged when 15 partners joined forces during UNCTAD's 14th Ministerial Conference in Nairobi, Kenya, to engage in a new way of supporting the uptake of e-commerce as a tool for development. Aiming to be a trusted and appreciated information hub on the various resources available to facilitate developing countries' journey to e-commerce, the initiative strives to advance the dialogue on the development impacts of digital transformation.
Digital Economy for Africa Initiative (DE4A), World Bank/ Digital Moonshot Africa, African Union	Regional initiative in digital enterprise and employment	DE4A is part of the World Bank's support for the African Union's Digital Moonshot Africa, which aspires to digitally enable people and businesses in Africa by 2030. The five pillars of the initiative are digital infrastructure, digital skills, digital platforms, digital financial services, and digital entrepreneurship.

Supported by



International Labour Organization



Kingdom of the Netherlands