# Platform work as an opportunity for aspiring IT-workers? Evidence from four Sub-Saharan African countries<sup>†\*</sup>

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### ABSTRACT

The emergence of platform work is an important manifestation of the changing nature of work because of technological progress and digitalisation. Empirical evidence on the nature and relevance of platform work, particularly in Africa, remains scarce. Using a unique sample on aspiring IT workers from four African countries, we address this gap by examining the prevalence, characteristics, and earning potential of platform work. We find, first, while the majority of individuals seek platform work for its flexibility, only about one in five individuals is actually successful in finding a job on an online labour platform. Second, social media, particularly LinkedIn, has become increasingly important in the job search process, surpassing specialised platforms in our sample. Third, the patterns of tasks performed on the platform differ systematically between countries. Fourth, platform work is on average low paying , at least when project acquisitions costs are taken into account and especially when compared to non-platform work. We provide some reflections on the implications of our results for policies toward platform work.

### JEL classification: N27, 010, J40, L86, J23, J30, J80

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## 1 Introduction

Because of technological progress and digitalisation, the world of work is changing fast, and rapidly growing IT sectors as well as the emergence of online labour platforms are manifestations of this. The resulting labour market outcomes and dynamics are not well understood, in particular in the Global South.<sup>1</sup>

On the one hand, it is often assumed that online work creates new and better opportunities for workers who would otherwise have no access to similarly gainful employment or join the global knowledge economy. In this view, platforms constitute an opportunity for those who have the means to serve the global demand for online labour, and it is well acknowledged that these means include the necessary technical skills and training. These platforms are said to provide the dual benefits of bringing much needed foreign exchange to low-and-lower-middle-income countries, and income to individuals and households. Beyond that, the online availability of management practices and organizational know-how as well as technical training may allow for upward labour market mobility (locally and globally).

On the other hand, instead of using these platforms as steppingstones for breaking into the global knowledge economy, online workers from the Global South may perform mundane work at armslength, without much learning benefit, and without the contractual benefits of the on-site workers they probably replaced in the Global North. In addition, intense competition on online labour platforms may mean that earnings might not be as high as one might expect. Seen from the perspective of workers in the Global North, it is argued that outsourcing to the lowest bidders in the Global South puts pressure on their wages as well as employment opportunities and conditions (Graham et al., 2017).

These considerations suggest that it is very likely that the gains of online work are not evenly distributed, even among those who eventually manage to participate in online work. Evidence on online work and workers is scarce. One important exception is the Online Labour Index produced by the Oxford Internet Institute that tracks the number of projects and tasks on the largest global online labour platforms. It allows to examine the activities on the platforms as well as the geographical patterns of demand and supply (see, for example, Kässi and Lehdonvirta 2018; Stephany et al., 2021). While labour supply comes primarily comes from low- and middle-income countries, labour demand originates almost exclusively in the high-income countries (Graham et al., 2017).

To our knowledge, the most comprehensive study on platform workers is the ILO's 2021 World Employment and Social Outlook (ILO, 2021) that draws on extensive original data collection among online (and location-based) platform workers. This report, which also uses insights from a previous ILO study (Berg et al., 2018) on crowdworkers on microtask platforms, highlights the ambiguities of participating in online work. Workers who have, on average, higher formal educational levels than

<sup>&</sup>lt;sup>1</sup> Digital labour platforms are digital platforms through which some form of work or service is directly transacted. The ILO's World Employment and Social Outlook "The role of digital labour platforms in transforming the world of work" (ILO, 2021) distinguishes online platforms, through which workers offer their services independent of their location, and location-based platforms, such as taxi or food delivery services. This paper is concerned with online labour platforms only.

their counterparts from the Global North typically appreciate the income opportunities and the flexibility of online work. Most would like to work more despite the fact that their wages are much lower than those of comparable workers from the Global North (ILO, 2021). Yet, the very competitive markets and their low bargaining power puts earnings under pressure and workers under stress. Social protection coverage rates among online platform workers from developing countries is rare, but most likely not lower than that of a comparable offline worker from the same country.

To date, we have thus gained some knowledge on the basic socio-economic characteristics of online workers and the characteristics of online work. Yet, only very few studies can rely on large samples of online workers that would allow for generalizable findings on (1) who participates in online work and (2) what are the characteristics of this type of employment, the tasks performed and the associated earnings and working conditions, and (3) how these employment characteristics compare to other opportunities on domestic labour markets or internationally. Even less is known about (4) the heterogeneity of online workers, for example across genders, and (5) the employment dynamics of online work, for example the extent of upward mobility and the role and the effects of training and learning-by-doing. These knowledge gaps exist – inter alia – because such analyses require a large sample of online workers, which allows to examine the characteristics of sub-groups, and panel data that tracks individuals over time.

The present study addresses selected aspects of these gaps. It quantitatively examines the characteristics and labour market prospects of aspiring IT-workers in four African countries. We focus and can draw on a unique dataset on young Africans in Ghana, Kenya, Rwanda, and Nigeria who have applied to virtual platform-based IT trainings by GetINNOtized, an impact-driven private German company active in Africa. GetINNOtized offers young Africans three-month cloud-centred IT-trainings through partnerships with Amazon Web Servers (AWS) and Microsoft to prepare them for careers in the global knowledge economy.<sup>2</sup> Specifically, quantitative data on more than 2,000 applicants to the training program were collected via web-based surveys and cover key labour market outcomes, such as individuals' labour market participation status, sectoral and occupational choices, earnings, and job quality. Moreover, our data cover important dimensions of work on online platforms, including its frequency, the type of websites that are being used for platform work as well as the type of tasks that are performed on platform projects.

While studies on online work typically narrowly focus on the characteristics of online work that is mediated through online labour platforms, we also examine other types of online work like wage employment in IT outsourcing firms (aka Business Process Outsourcing (BPO) firms). We also examine how platform work complements and compares with non-platform work. Using our unique data on aspiring IT workers, we investigate the socioeconomic characteristics (gender, age, socio-economic background) of IT workers, the role of platform work (participation in platform work, employment status and occupation) for them, the characteristics of platform work (field and type of work, working time, earnings) and how these compare to the characteristics of (non-platform) wage work across the four country cases.

<sup>&</sup>lt;sup>2</sup> GetINNOtized training programs are partly funded by the German Federal Ministry for Economic Cooperation and Development (BMZ) through the Digital Skills Accelerator Africa.

The paper is structured as follows. We first look at the rise of platform work in the context of a growing "digital workforce" in Africa. We then present our sample and methodology. Next comes our empirical analyses before we conclude with some reflections on future research and policy implications.

## 2 Platform work and Africa's growing digital workforce

Africa's "digital workforce" grows. For example, between 2020 and 2021 alone the number of professional developers increased by 3.8% from 690.000 to 716.000, according to Google's latest Africa developer ecosystem 2021 report (Google 2021).<sup>3</sup> This growth is related to four interdependent and mutually reinforcing trends that take place in different segments of the digital economy. First, there is a rapidly growing demand for IT-workers from Africa's technology startups. Second, "traditional" non-tech firms increasingly seek digital solutions; a development accelerated by the pandemic. Third, international companies have recognized the continent's potential for sourcing digital labour from the continent. Fourth, Africa's digital labour force increasingly (a) is hired by BPO firms and/or (b) participates in online labour platforms.

One of the main reasons for the increasing number of African software developers is the growing demand from African technology startups. Over the past decade, many African countries have seen the rise of fast-growing technology startup. Egypt, Kenya, South Africa, and Nigeria, the so-called "Big Four", have attracted increasing and very considerable amounts of (venture) funding (Tafese, 2022). Startups in these countries have become a major employer of software developers, employing 18% of software developers in South Africa and 37% in Egypt, Kenya, and Nigeria. In countries with less developed but increasingly dynamic startup ecosystems, such as Rwanda, Ghana and Morocco, startups are even more important as employers in relative terms, employing 73% of all software developers. In addition, startups play a key role in the IT sector because they typically (have to) hire junior developers (because they cannot compete with more established companies in terms of salaries) and provide them with critical on-the-job training.

In addition to start-ups, demand for IT professionals has also increased among traditional non-tech SMEs, for which the pandemic has significantly boosted technology adoption, in particular increased use of the internet, social media and/or digital platforms. In Kenya, for example, the proportion of firms using technology solutions has risen from 47% in summer 2020 to 71% in autumn 2020 (Google, 2021). With many local firms going online for the first time, web developers and data analysts are in high demand.

At the same time, international companies have also become another major force behind the growing demand for African IT professionals. However, rather than training junior developers themselves, they tend to target more experienced mid- to senior-level developers, luring them with salaries that are significantly higher than what they would earn in local firms. For example, according to Google (2021), developers from international companies earn 1.4 times more than developers in local businesses.

<sup>&</sup>lt;sup>3</sup> However, most of the continents' software developers come from just a handful of African countries, namely South Africa, Egypt, Nigeria, Kenya, and Morocco. Moreover, even in these countries, professional software developers make up only a small fraction of the non-agricultural labour force, ranging from 0,3% in Nigeria to 1,4% in South Africa, with a continental average of 0.4%.

Demand from international companies has particularly accelerated since the outbreak of the Covid-19 pandemic, as remote working has become the main mode of operation for many international companies, with 38% of African software developers reporting that they work for at least one company headquartered outside Africa.

Some activities of those international companies are related to another trend that shapes demand for labour with IT skills. The trend towards outsourcing services to Africa includes both high-skilled IT work, such as software and web development or data science, and low-skilled digital work tasks, such as data entry and cleaning, image tagging or transcription. However, the IT or IT-enabled BPO industry still plays a marginal role in Africa, both in terms of its contribution to GDP and in terms of job creation (Anwar and Graham, 2022).<sup>4</sup> Traditionally, BPO companies have been the main intermediaries facilitating the exchange of services between the labour supply, i.e. the IT-workers they employ, typically in developing countries, and labour demand from clients in mostly Northern countries. Some African countries have also become more attractive destinations for BPO companies due to significant improvements in internet connectivity and relatively low labour costs. Further, some countries, including Kenya, South Africa, Nigeria, and Uganda, have been actively promoting the sector through targeted incentives (Anwar and Graham, 2022).

In recent years, the BPO industry has faced increasing competition from online labour platforms, which also function as an intermediary between labour supply and demand. Firms, including former BPO clients, increasingly turn to these platforms to outsource their services to workers from around the world, especially since the COVID-19 pandemic (ILO, 2021).<sup>5</sup> Because individual and highly fragmented tasks can be posted by clients on digital labour platforms, with workers digitally matched based on certain selection criteria/bidding processes, payments made digitally, and work delivered digitally, this can massively increase the speed and reduce the transaction and coordination costs of outsourcing and completing certain types of work. There are different types of online work platforms, such as freelance, contest-based, and microtask platforms (ILO, 2021), and tasks can range from the very mundane to the highly complex, from a few seconds to months. Yet, they all have in common that they are fundamentally redefining the relationship between employers and workers, as activities traditionally based on employment relationships are carried out on platforms by independent contractors, paid on a project-by-project or "gig" basis (ILO, 2021).

<sup>&</sup>lt;sup>4</sup> In the absence of official statistics on the BPO industry in most African countries, studies typically rely on approximations based on surveys and interviews.

<sup>&</sup>lt;sup>5</sup> According to (ILO, 2021), the demand for online work largely originates from Western countries, i.e., Australia, Canada, Germany, New Zealand, the United Kingdom of Great Britain and Northern Ireland, and the United States.





Source: https://geonet.oii.ox.ac.uk/blog/mapping-the-availability-of-online-labour-in-2019/.

As the bottom panel of Figure 1 illustrates, a significant share of global online labour supply comes from the "Big Four" in Africa – while demand mainly originates in the Global North (see top panel of Figure 1). In general, a large share of those with profiles on online labour markets are not successful in obtaining work, which is typically interpreted as an "oversupply of online workers" on platforms (Anwar and Graham, 2022). This is particularly the case in African countries, but also in other places, including India.<sup>6</sup> This is typically partly attributed to fierce global competition among workers from Africa, India, Bangladesh, and the Philippines (Anwar and Graham, 2019).

At the same time, even for those Africans who have found work in the BPO industry or on online labour platforms, working conditions are sometimes problematic, as the digital market is still systematically unregulated, leaving many workers vulnerable to exploitation. Employment relationships of both BPO

<sup>&</sup>lt;sup>6</sup> According to estimates by Anwar and Graham (2022), based on data scraped from Upwork.com, Africa has an oversupply of workers on the platform of around 94%, compared to 88% in India and 86% in the Philippines (see Table 3.3 in Anwar and Graham, 2022)).

and online workers are often characterised by a lack of contractual security, close monitoring by employers/clients, low bargaining power for workers, discriminatory practices and long working hours (including time spent for landing new projects) and low pay (Anwar and Graham, 2021, 2019; Berg et al., 2018; Graham et al., 2017; ILO, 2021).

## 3 Sample and methodology

Our sample of aspiring digital workers consists of young Africans who have applied to training programs by GetINNOtized, a Ghanaian/German social enterprise whose main aim is to improve the employment opportunities for young Africans in the global IT sector by providing free (online) upskilling IT training.<sup>7</sup>

## 3.1 GetINNOtized training program

GetINNOtized's training is program is partly funded by the Germany Federal Ministry for Economic Cooperation and Development (BMZ) (financially) through Digital Skills Accelerator Africa (DSAA) that was founded in 2019 as an independent organization to promote the African digital sector. The aim of the GetINNOtized training programme is to act as a conduit between academia and the labour market, with graduates of the programme receiving career mentoring and placement assistance in addition to training to connect them with potential employers.

Target group	Program content	Program structure			
High school and higher	AWS Cloud Services	• 3 months of free, full			
educational	and Microsoft Business	time and online			
attainment	Analytics	training			
No prior coding	Career mentoring and	• 50-200 trainees per			
knowledge necessary	job placement	batch			
• Open to all Africans,	Certification after				
but country-specific	graduation				
batches					

## Table 1: GetINNOtized training program

Source: Own elaboration.

Table 1 depicts the key characteristics of GetINNOtized training programs. In terms of the target group, the training program is open to graduates from high school and higher educational attainment. While some programming knowledge is advantageous, no prior knowledge in programming is required. In

<sup>&</sup>lt;sup>7</sup> In addition to training activities, GetINNOtized provides IT and digital services to, typically, multinational clients through its service center.

principle, the training program is open to Africans across the continent, batches typically focuses on candidates from one or only a few African countries, especially Ghana and Kenya in particular, followed by Rwanda and Nigeria.

In terms of the content of the training program, trainees learn the fundamentals of cloud technologies and services. Specifically, participants are taught cloud fundamentals of the AWS and Microsoft ecosystems. Alongside the technical training, trainees receive career mentoring training and job placement assistance after the training. In addition, after successful graduation, trainees take the accredited AWS examination to become certified cloud engineers.

As for the structure, the training program is full time, online, and for free. It takes 12 weeks to complete and contains two hours of training in the morning and two hours in the afternoon.

## 3.2 Data collection and sample characteristics

Data were collected via a web-based survey programmed in SurveyCTO from multiple batches with 50-200 trainees that applied to the training programs by GetINNOtized at different times during 2021 or 2022. Each training batch typically focuses on candidates from one or two specific African countries, targeting young Africans from Ghana and Kenya in particular, followed by Rwanda and Nigeria. This is also reflected in the composition of our sample which consists of 2102 Africans in total, of which 61.5% are from Ghana, 22.3% from Kenya, 6.7% from Nigeria, and 9.6% from Rwanda.

Country of residence	Observations	Share	
Ghana	1293	61.5	
Kenya	468	22.3	
Nigeria	140	6.7	
Rwanda	201	9.6	
Total	2102	100	

Table 2: Country of residence of survey respondents

Source: Own elaboration based on IT-worker survey.

Table 3 shows the basic socio-economic characteristics of our survey respondents. Candidates of our sample are on average 28 years old, mostly male (77%), and have either completed undergraduate (32%) or graduate (55%) studies. In terms of their focus study area, respondents come from a variety of disciplines, with computer science (27%), economics (22%) and engineering (17%) being the most common (not reported in Table 3). In addition, nearly half grew up in a city or metropolitan area (45%) and around one fourth in either a town or village.

However, except for their gender – between 68% in Kenya and 79% in Ghana are male –, there are considerable differences in the characteristics of candidates across the four countries. Nigerian candidates are for example, on average, significantly older, better educated, and more likely to come from a city or metropolitan area than their peers from Ghana, Kenya, and Rwanda. Candidates from Kenya and Rwanda, in particular, are much more likely to have grown up in a rural area such as a village

or a farm. In line with this, a higher proportion of respondents from Rwanda and Kenya report to have worked on the farm when growing up (37% and 46% respectively) than in Ghana and Nigeria (26% and 29% respectively), and to have grown up in a poor household or one with below-average wealth. In particular, respondents from Kenya are coming from more rural households, as only around 17% of Kenyan respondents had a computer when growing up compared to 35-39% in the other three countries.

Country of residence	Age	Male	Education			Origin		
			Graduate	Undergraduate	High School	City/metrop.	Town	Village/farm
Ghana	28	0.79	0.27	0.61	0.11	0.54	0.32	0.14
Kenya	27	0.68	0.28	0.56	0.12	0.18	0.23	0.58
Nigeria	30	0.73	0.64	0.28	0.06	0.64	0.27	0.09
Rwanda	26	0.73	0.47	0.4	0.11	0.32	0.27	0.4
Total	28	0.75	0.32	0.56	0.11	0.45	0.29	0.26

#### Table 3: Socio-economic characteristics of survey respondents

#### Source: Own elaboration based on IT-worker survey.

Overall, the composition of our sample is very well suited to analyse the phenomenon of online work, as it consists of (i) relatively young individuals, (ii) with a relatively high level of education, (iii) who aspire to work in the digital economy. From other studies (e.g. Berg et al., 2018; ILO, 2021) we also know that this group of people is much more likely to engage in online work. However, we have a very selective sample of individuals applying for a particular training program, so it is important to note that the statistics presented in the next section are not representative African or country-level population. Yet, given the lack of official data on platform workers, and therefore a sampling base from which to draw a representative random sample, our survey data provide an important complement to existing survey data on online work that has been collected through different approaches. A comparative strength of our data is that it does not just focus on a specific platform or online work in general, but also comprehensively covers other sources of income generation.

## 4 Empirical Findings

## 4.1 Prevalence of and reasons for platform work

We asked our survey respondents if they had ever used an online labour platform to look for work. Figure 2 shows that the vast majority of them, 62% in total, had done so, but were unsuccessful in finding a job on an online labour platform.<sup>8</sup> In addition, 10% did not look for work on an online platform because they did not know about it, 5% because they did not see the need for online work and 4% for other reasons. Out of our total sample of 2102 people, only 404 or 19% found work through an online job platform. In terms of the characteristics of online workers, 78% are male, 90% have an

<sup>&</sup>lt;sup>8</sup> We define on online labour platforms as places where workers and employers are matched digitally, payments are conducted digitally, and the work is delivered digitally. Examples include Freelancer.com or Upwork.com.

undergraduate or postgraduate degree and the average age is 29 – so the average online worker is quite similar to the average individual in our total sample.



Figure 2: Prevalence of platform work

Source: Own elaboration based on IT-worker survey.

Although directionally similar, there are some differences between countries in terms of the prevalence of online work in our sample (Figure A1). While in Kenya and Nigeria around one in four participants had found an online job, in Rwanda and Ghana it was only around one in six. At the same time, only 4% of Kenyans were unaware of the possibility of platform work, compared to 13% in Ghana and around 8% in Rwanda and Nigeria.

In terms of the reasons why individuals engage in platform work, the *flexibility* of online work is cited by more than half of all individuals as a reason for looking for work on online labour platforms (Figure 3). This is followed by the *career options* offered by online platform work and the *lack of local job alternatives*. *Good pay* on platforms and *well-aligned interests*, on the other hand, are only mentioned by around one in three individuals.



Figure 3: Main reasons for looking for platform work



### 4.2 Characteristics of platform work

We now look at the characteristics of platform work in more detail, focusing only on the 404 individuals with experience of platform work. The most common platform through which candidates found a job was LinkedIn (Figure 4). This finding is surprising as LinkedIn is not a specialised online labour platform. However, our findings are in line with those of the ILO (2021), which suggests that many respondents overcome the high commissions and withdrawal fees of traditional online labour platforms by finding clients directly through social media platforms such as LinkedIn. After LinkedIn, the two leading global platforms, Upwork and Freelancer, and the largest job placement platform in sub-Saharan Africa, Jobberman, are the most commonly used platforms for online work by individuals in our sample.



### Figure 4: Platforms used for online work

Source: Own elaboration based on IT-worker survey.

We also asked those who had found work on the platform at some point in the past how many projects they had worked on in the last six months (Figure 5). The vast majority of respondents said they had worked on between 0 and 5 projects in the last six months: 34% had worked on 2-5 projects, 31% had worked on a single project and 20% had not worked on any projects.



Figure 5: Number of projects in the last 6 months

Source: Own elaboration based on IT-worker survey.

Looking at the types of tasks performed by platform workers, *clerical work and data entry* are the most common, with almost half (200 out of 404) of the platform workers in our sample reporting having performed these activities in the last six months (Figure 6). Some distance behind, *software development* and *writing and translation* are the second and third most frequently performed tasks.



#### Figure 6: Main platform tasks

A breakdown of tasks by country reveals interesting differences in the emphasis of tasks performed across countries (Figure A2); in Ghana and Nigeria *clerical and data entry* activities are clearly the most common tasks performed by platform workers, followed by *software development* and *professional services activities*. In Kenya and Rwanda, however, the situation is somewhat different. In neither country are *clerical and data entry* activities the main tasks, but rather *writing and translation* activities in Kenya and *software development* in Rwanda.

In terms of project completion and acquisition time, there are significant differences between tasks (Figure 7). We asked platform workers how long it takes them to complete a project (left panel, Figure 7) and how long it takes them to get hired for a project (right panel, Figure 7).<sup>9</sup> Unsurprisingly, *software development* projects take by far the longest to complete with a median of 21 days, ahead of *professional services, clerical and data entry,* and *sales and marketing* projects, which take between 5 and 3 days to complete (left panel, Figure 6). In terms of the time online workers typically spend getting hired for a project, the differences between tasks are more modest, ranging from 5 to 7 days for *software development, writing and clerical projects,* and slightly more/less time for *services/sales* projects with a median of 14/2 days. Overall, online workers spend a considerable amount of time before finding a job. In fact, they spend as much time looking for a project as they do working on it.

Source: Own elaboration based on IT-worker survey.

<sup>&</sup>lt;sup>9</sup> Respondents were free to indicate their response in the unit of time of their choice, i.e. in hours, days, weeks, months or years.

#### Figure 7: Completion and acquisition time of platform projects by task



As the main tasks vary from country to country, the usual number of working days required to complete a project varies accordingly: Kenyan online workers take a median of two working days to complete a project compared to 6.5 in Ghana, 7 in Nigeria and 21 in Rwanda; at the same time, it takes Kenyan workers take around 3 days to find work, compared to 7 and 28 in Ghana and Nigeria.

### 4.3 Earnings of platform and non-platform work

We now take a closer look at the earnings of platform workers. The left panel of Figure 8 shows how much platform workers earn for completing a project, distinguishing between different tasks. As might be expected, the project value is highest for *software development* projects, for which platform workers earn a median of USD 167, closely followed by *sales and marketing* projects with a median value of USD 150. With median project values of USD 50, 42, and 35 respectively, individuals earn significantly less for projects in *professional services, clerical and data entry,* and *writing and translation*.



#### Figure 8: Earnings of platform work by task

Source: Own elaboration based on IT-worker survey.

However, if we look at the derived earnings per day, which we estimate as the project value divided by the time taken to complete and acquire a project, in the right panel of Figure 8, the situation is different. Because of the relatively long time it takes to complete a *software development* project, the derived earnings per day are no longer much higher for such projects. In fact, despite lower project values, individuals earn more per day in *writing and translation* and *professional services* than in *software development*, with a median of USD 4 compared to USD 3. However, *sales and marketing* and especially *clerical and data entry*, still pay much less, at around USD 1.5 and USD 0.8 per day, respectively.

To put the importance of earnings from platform work into perspective, Figure 9 shows box plots of earnings from non-platform work for the same tasks for employed individuals in our sample. A number of key findings emerge. First, income from non-platform wage work is significantly higher than income from platform work. Comparing the right-hand side of Figure 8 with the right-hand side of Figure 7 shows that this is the case for all tasks. For example, while the median daily income from online platforms for *software development* is around USD 3, the median for non-platform wage work is around USD 16. Second, there is much less heterogeneity in earnings across tasks for wage work. For example, the earnings gap between the lowest and highest paid tasks is much smaller for wage work than for platform work; for wage work the median monthly wage gap is around USD 103 compared to a median monthly project value gap of around USD 132. Third, even within tasks, there is less heterogeneity in wage work than in platform work. The overall standard deviation for wage work is USD 360 compared to USD 3540 for platform work.<sup>10</sup>



### Figure 9: Wages for employees from non-platform work by task

#### Source: Own elaboration based on IT-worker survey.

The comparison of wage and platform work already shows that, at least for the individuals in our sample, income from platform work is not a substitute for income from wage work. This is also confirmed by individuals from all four countries when asked whether platform work is their main

<sup>&</sup>lt;sup>10</sup> These findings also hold when we compare earnings from wage work with earnings from platform work for only those individuals who are engaged in both types of work.

source of income. However, there are some differences between countries, with platform work being the main source of income for only one in four Ghanaian platform workers, compared to one in three in Rwanda and Nigeria, and two in five in Kenya.



Figure 9: Is platform work your main source of income?

Source: Own elaboration based on IT-worker survey.

## 5 Conclusion and policy implications

Rapid technological progress and digitalisation have changed the nature of work, and the emergence of platform work is an important manifestation of this. However, empirical evidence on the nature and relevance of platform work, particularly in Africa, remains scarce. Using a unique sample on aspiring IT workers from four African countries, we have addressed this evidence gap by examining the prevalence, characteristics, and earning potential of platform work vis-à-vis non-platform work. Four key findings emerge from our research. First, while the majority of individuals seek platform work for its flexibility, only about one in five individuals is actually successful in finding a job on an online labour platform. Second, social media, particularly LinkedIn, has become increasingly important in the job search process, surpassing specialised platforms like Upwork, Freelancer, and Jobberman in our sample. Third, there are significant differences between countries in the types of platform projects performed by individuals. For example, respondents from Ghana and Nigeria tend to work on projects that focus on *clerical and data entry activities*, while respondents from Kenya and Rwanda tend to work on projects that focus on writing and translation and software development. Fourth, platform work is on average low paying, at least when project acquisitions costs are taken into account and especially when compared to non-platform work. This is true for all major tasks, suggesting that platform work is only a supplementary source of income for most people.

Our study has several implications for policies and interventions that address the challenges associated with platform work. First, while there are similarities between the countries studied, there are also important differences, for example in skill levels of IT-workers and in specialization patterns. This implies that there is scope for a regional approach in designing programs, but it also means that country-specific components are likely to be required. Second, we believe that our findings cast some doubt on whether creating standards for pay and working conditions on the platforms is the right approach towards leveraging the benefits of platform work. Consider the concept of minimum pay or wages. For many tasks mediated through the platforms it may be very difficult to determine an adequate minimum pay. This is not to say that exploitative practices are to be reduced or banned, but there is a risk to exclude workers with relatively low productivity from participating in platform markets. For most workers in our study platform work complements earnings, with total earning well above minimum wages. These issues merit deeper analysis, but our findings may suggest that raising awareness of the risks associated with platform work through information and transparency campaigns, including on the platforms themselves, as well as the provision of targeted trainings may be more appropriate approaches. Finally, the challenges of high sunk search costs and risks associated to uncertainties in profits margins of individual "gigs" may provide a rationale for supporting organizational innovations for platforms - be it small firms or cooperatives - that pool risks and minimize search costs.

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## Appendix



Figure A1: Prevalence of platform work across countries

#### Source: Own elaboration based on IT-worker survey.



### Figure A2: Main platform tasks across countries



Source: Own elaboration based on IT-worker survey.