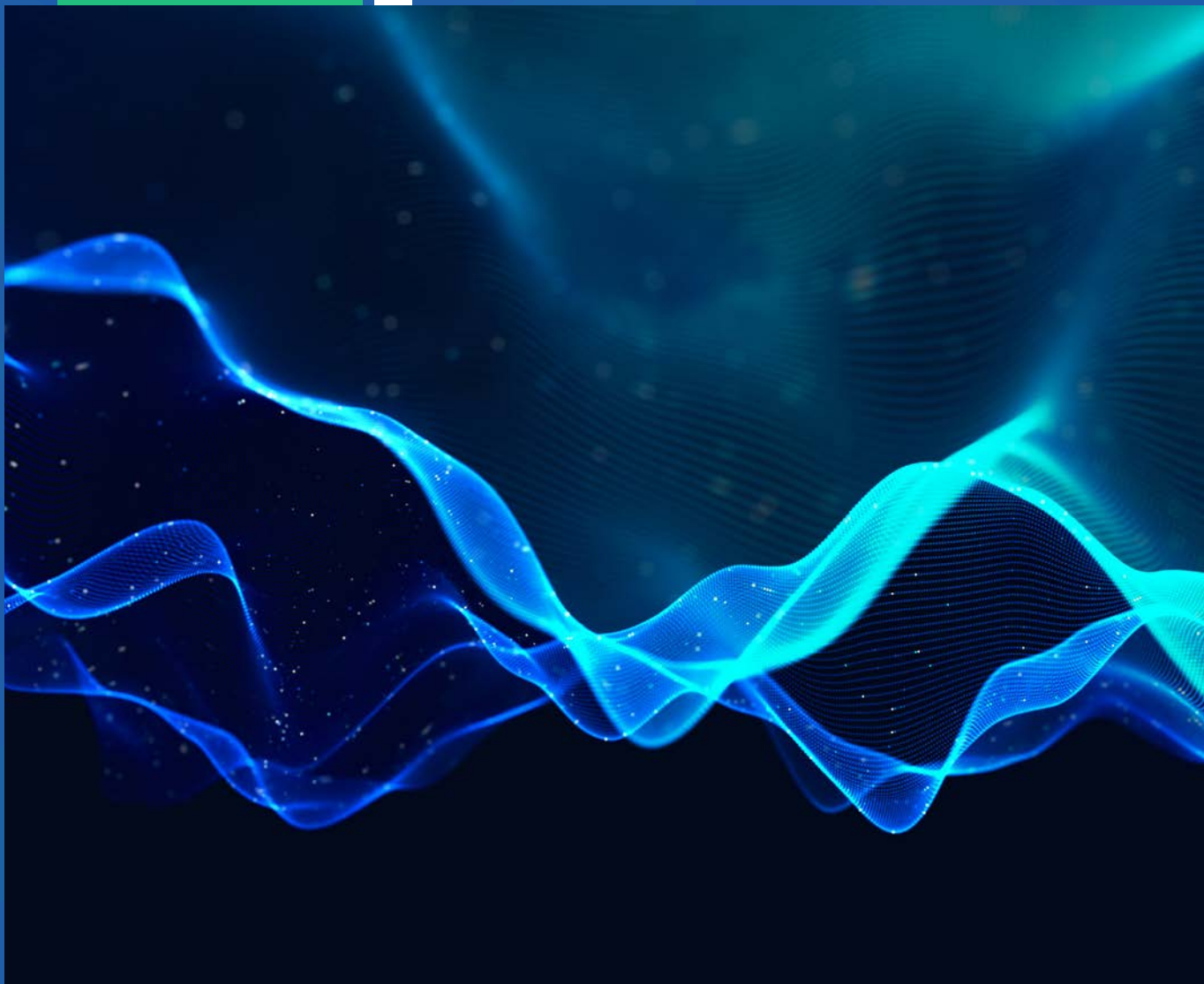


# DIGITALIZATION AND LABOR IN AFRICA: A REGIONAL SNAPSHOT FOR RELEVANT SOCIAL INTERVENTIONS

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## Abstract

The digitalization of labor is increasingly becoming a potential pathway to bridging socio-economic development deficits, particularly unemployment gaps in Africa. This pathway is even more imperative for the region, considering its relatively young population with a high unemployment rate. This report appraised the impact of increasing digitalization on labor across economic sectors in Africa, highlighting the current issues and challenges faced by workers in the region and the state of policy evolution in relation to labor and the digital economy with respect to Africa. The report elucidates structural inequalities in relation to digital skills and labor supply, which shifts bargaining power inequitably in favor of digital companies in their ability to drive down workers' wages and the plausibility for collective bargaining. This precarious working condition for digital labor is exacerbated by workers' algorithmic management, which further constrains their agency for bargaining and autonomy. Another important challenge within the gig space in the region is the high dependence on technology devices (such as computers and mobile phones) and internet access. In this respect, the affordability of those and erratic power supply systems are limiting participation barriers for the labor force in Africa within the global digital economy. Sadly, in addressing these challenges across the region, there are yet clear legal mandates or regulatory policies by countries explicitly dealing with the emerging labor issues related to the increasing digitalization on the continent. In the context of the above regulatory and policy lacuna, African gig workers demonstrate resilience over the emerging constraints in the digital economy concerning working conditions and rights. They rely on often subtler and less aggressive mechanisms than traditional worker union approaches. The report concludes with recommendations and intervention areas for stimulating digital labor in Africa to accelerate its contribution to the inclusive socio-economic development of the region.

## Introduction – Context and Rationale

Emerging digital innovations are expected to impact Africa's socio-economic development significantly. Key sectors among impact areas include agriculture, financial services, small and medium scale enterprises (SMEs), and the gig economy (Melia, 2020). The agricultural sector, for instance, employs a significant portion of Africa's nearly 1.4 billion population and is vital for the industrialization of the region's economy. Across the region, digital innovations such as ML (machine learning)-based applications are currently being harnessed for improved yield prediction and early disease detection in countries like Nigeria, Zambia, Malawi, Tanzania, and Kenya (Ly, 2021). The growing interest in ML-based agriculture is driving increased investments in AI (artificial intelligence) startups that create commercial products and services for farmers and agribusinesses on the continent. Some of these agric-AI-based agric startups include MySmartFarm, Aerobotics, and DroneClouds. However, although the potential for these startups is high, their overall impact on the sector is still quite limited. Scaling this technology capability within the region has been hampered by sub-optimal data systems and technological skills availability.

In particular reference to the gig economy, the current uptick in the global economy is driving the growth of the online labor sector in Africa. A key attraction for the African gig economy is a relatively younger population. This emerging economic sector provides a potential

for increased job opportunities for young Africans in a digitally connected world. A critical downside is that gig work remains largely unregulated in the region. Without traditional social protections and standardized conditions of work, in an oversupplied labor sector with significant wage suppression (Graham & Anwar, 2018; Jean-Paul & Mudavanhu, 2018). This wage condition is deemed a better alternative to the lower-paying jobs within the region's largely informal economy, with high levels of youth under- and unemployment. Concerning size, the gig economy in Africa is relatively smaller than competing regions in Asia and the more developed economies, with a market valuation of about US\$300 million, accessed by about a million African workers (Tsibolane et al., 2018).

Within the context above, this report aims to highlight the impact of digitalization on the current state of labor for African workers in the global digital economy, identify the critical constraints, and the evolving roles and responses of constituencies within the emerging labor ecosystem in the region.

### **Report Method**

The report's development followed a method of reviewing relevant literature, including academic journals, industry reports, and policy briefs. In-depth interviews with 8 Key Informants (see appendix) and a regional roundtable of 17 participants selected across Africa's labor and policy ecosystem complemented insights from the analysis of the documents. Participants for the roundtable were selected from a representation of labor unions, government, civil society, academia, think tanks, multilateral agencies, and private organizations.

### **Current issues and challenges faced by African workers in the digital economy**

One persistent issue concerning African workers within the global digital economy is the risk of exacerbating existing structural inequalities, especially the prominent gender differences in the region's labor market outcomes. In this respect, women have a lower labor force participation, primarily due to a lower digital literacy level. This divide is significantly related to lower STEM (science, technology, engineering, and mathematics) education. In addition, there is also the prevalence of gender stereotyping in work allocation with consequent income differences in favor of males (Onkokame et al., 2018; WEF, 2020).

Another issue of note within Africa's digital labor space is very much related to the technical capacity of workers to gainfully engage within the global digital economy (Moore, 2017). With digital skills becoming a critical production factor in the digital economy (Brynjolfsson et al., 2014), there is the likelihood of work segregation towards higher-skilled jobs. This skill requirement is currently scarce within the region; exacerbated by the increased emigration of skilled workers abroad) as automation trends rise in secondary high-wage economic sectors such as manufacturing and service industries (Rapanyane & Sethole, 2020). This situation becomes even direr considering the existing social structure in Africa. In this context, population growth is not matching job growth leading to labor oversupply and consequent transience in emerging job segments within the digital economy in the region (Gaus, 2015). This precarious labor market situation consequently shifts bargaining power inequitably in favor of digital companies. This shift is in relation to their ability to drive down worker wages and the plausibility for collective bargaining. This economic dynamic pivoted on cheap labor creates a vicious cycle that negatively impacts the incentive for larger-scale automation. The

result is a consequent decline in the potential levels of industrialization within the region's economic sectors.

Within the context above, extensive automation seems quite far-fetched within the short to medium term in Africa, especially in traditional sectors such as agriculture, with a consequent minor displacement of workers currently domiciled within the region's informal economy. In contrast, the opposite might be likely for high-wage sectors such as manufacturing and service industries. This scenario paints a dire picture for Africa's growing middle class aspiring for formal jobs. The situation may lead to a reshoring of production away from the region to produce at lower costs closer to their domestic markets.

Concerning the emerging gig economy in the region, there are the issues such as the already highlighted precarious working conditions for digital labor. This challenge is exacerbated by algorithmic management of works – which further constrains their agency for bargaining and autonomy (Anwar & Graham, 2020). According to an interviewee, “When large percentages of your workforce are informal, it is incredibly difficult to organize labor...” The suppressed wage work competed by workers on gig platforms is sometimes never even paid once the platforms decide that their work was unsatisfactory or completed on time (Anwar & Graham, 2021). This wage mechanism is in contravention of ILO (International Labor Organisation) standards (ILO, 2005).

Another critical challenge within the gig space is the high dependence on technology devices (such as computers and mobile phones) and internet access. Affordability of those and erratic power supply systems are limiting barriers for the labor force in Africa within the global digital economy (Jean-Paul & Mudavanhu, 2018). The region has the lowest internet penetration rate at less than 30 percent on average (Mothobi, 2021). Within this infrastructure divide is the constraint of sub-optimal payment systems that limits the easy payment for gig work completed by African workers on global digital platforms, compounded by the fact that only a small portion of Africa's population is included in formal banking systems while innovative mobile payment systems such as M-Pesa (Kenya) and M-Birr (Ethiopia) are largely country-unique and do not allow for international transfers (Mtsweni et al., 2016).

### **Policy evolution with regards to labor in the digital economy across Africa**

Currently, across Africa, there are yet clear legal mandates or regulatory policies by countries explicitly dealing with the emerging labor issues related to the increasing digitalization in the region (Access Partnership, n.d.). This situation is channeled on very little evidence-based policy analysis that seeks to address the aforementioned evolving issues (Brown & Adolwa, 2017; Tsibolane et al., 2018). More specifically, with the fledgling gig sector (with all its challenges highlighted) bridging critical employment deficits in the region, the incentive for a more nuanced industry regulation is further constrained. This condition is imperative, especially in the short term, even if this intervention might have a net positive impact in the long run (Gaus, 2015). This gap is noteworthy considering the current policy regime across the region where the legacy regulatory frameworks in particular relation to labor issues such as social protection and labor rights of workers only cover a small portion of workers, especially those in the formal sector (Bhorat et al., 2017). This institutional void further constrains the agency of African workers in bargaining for improved working conditions within the global

digital economy (Anwar & Graham, 2020). Furthermore, from a digital payments perspective, transaction costs for financial transfers in Africa are relatively steep (twice as high on average: Jean-Paul & Mudavanhu, 2018). This position is in comparison to global thresholds, making most African monetary authorities place significant barriers to the cross-border free flow of money.

### Constituencies' evolving roles and responses

Nevertheless, within the context of the above regulatory and policy lacuna, African gig workers are demonstrating resilience over the emerging constraints in the digital economy in relation to working conditions and rights, relying on often subtler and less aggressive mechanisms than traditional workers' unions. One critical impediment they are addressing via these mechanisms is lowering their relatively higher barrier to entry for gig work on digital platforms. This labor constraint is imperative, especially for starters who have no legacy platform review scores, to enable them to win additional jobs. They circumvent this entry barrier by doing free work, buying fake feedback and reviews from clients who post non-existent gigs on the platforms or even buying pre-approved accounts with worker locations set for choice geographies such as the United States of the European Union (Anwar. & Graham, 2020). In addition, within this respect, workers could also set up multiple gig accounts using the identities of friends and relatives to rake up more 'connects' per month – favorable for successful job bidding. Another related survival mechanism employed by workers in Africa, this time in dealing with technology infrastructure deficits either by using free public internet hotspots, taking out loans to purchase second-hand laptops, or even sharing laptops within their social networks.

While all the above responses have been mainly channeled at the individual worker level, the influence of worker associations or trade unions within the emerging issues in the digital economy in relation to labor has been weak in Africa (Anwar & Graham, 2021). As evident, most of the workers in the emerging gig sector are not members of the extant trade unions in African countries, though there are pockets of action to get this important mechanism to start scaling within the region. These include the evolution of worker unions such as app-based worker associations, as currently most prominent in the transport sector in Africa. These worker associations rely on social networks such as WhatsApp and Facebook to coordinate their activities (MCF, 2019).

### Conclusion

While digital work has significant potential for bridging unemployment deficits in Africa, achieving sustainable socio-economic development via this pathway can only be realized with a complementary evolution of policies and their practical implementation, especially concerning working conditions and labor rights, ubiquitous digital infrastructure development, as well improving worker skills and competencies as applicable within the global digital economy. According to an interviewee,

'The hype around Digitalization and its adoption-driven by Western-led institutions like the UN, World Bank and IMF, donor governments and philanthropic organisations, as well as the global tech giants- is truncating more pertinent local engagement of socio-economic issues on the continent around health, education, jobs, social equality etc.'

### Recommendations and Intervention Areas

- To bridge the scarcity of empirical evidence base for optimal policy evolution with respect to labor issues and the digital economy, there needs to be more Africa-specific research to understand the macro and micro development imperatives of emerging economic sectors such as gig work in the region. This contextual underpinning will help understand contingent economic models for pragmatic policy evolution that is relevant to specific country contexts, covering these specific areas:
- Understanding gig worker profiles (including demography) across digital labor platforms
- Platform governance mechanisms for enforcing digital labor rights to ameliorate the exploitation of African workers in the global digital economy.
- Assess the impact of digital labor policies on entrepreneurship, informality (mis) allocation of skills and resources across economic sectors.
- Policy interventions to extend social protection to the informal sector and the gig economy.
- Risk impact assessment of algorithmic management of workers in relation to:
  - The destruction, transformation and creation of jobs
  - Workers' human rights and privacy rights
  - Working conditions with respect to access to tasks, career progression, employment stability, income security, psychological impacts, remuneration and working time flexibility
  - Collective association and trade union rights
- Digitalization of the world of work within the broader context of the political economy, the organization of production, and the structure of labor markets.
- Developing technical capacity for optimal labor policy evolution in the region as it relates to the digital economy. This process should encompass key policy ecosystem stakeholders including policymakers and worker union leadership.
- In order to accelerate the upskilling of workers in the region for more economic participation in the global digital economy, there is the requirement for long-term investments in the region's educational systems, transforming them to empower workers with the requisite professional and in-demand digital skills. This process can be facilitated both within the traditional educational institutions as well as new educational channels like open learning platforms.
- For more effective labor rights and working conditions advocacy, labor unions (both traditional and emerging forms), relevant civil societies, and think tanks within the region need to be supported in scaling their capacity for more significant engagements and interventions concerning labor-relevant challenges in the digital economy.

In channeling these recommendation areas for intervention projects, stakeholder entities and private organizations should carefully consider the long-term feasibility and impact, the contextual institutional complexities and alignments, and the optimal funding levels required for their end-to-end implementation within the region. Interviewees made some pertinent suggestions in these regards as below:

- Interventions should be locally generated and locally-driven with the right experts as they have the expertise and experience in what works and what doesn't in-context. This focus can help bridge the current misalignments between the volume and nature of private interventions and the socio-economic reality on the ground.
- Align intervention programmes with the local governments' policy priorities, which have an underpinning institutional framework. This process will guarantee project sustainability and leverage the critical support required for the successful outcomes of project initiatives.

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#### Appendix - Key Informant details

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