

The Future of Work: Is the Gig Economy Working for Developing Countries?

Background note for IGF 2017 panel

Digitization and networked communications are increasingly touching all aspects of modern life. Among them is employment, which has served as a key organizing principle for society since the industrial revolution. Employment has long anchored labor contracts and the division of labor within organizations, large and small. It has also shaped individual careers, orienting investments in basic education and job training. In many countries, traditional employment is at the center of social protection programs, from health care to pension systems.

Employment also affects individual's sense of belonging to a social group with shared career expectations and norms. Promoting equal employment opportunities is often at the center of economic and social inclusion programs for women, racial minorities and the youth. As a result, ongoing changes in digital communications and computing that significantly affect the nature of work are poised to have long-lasting impacts on development outcomes.

Currently, a number of forces are reshaping traditional employment, and more generally how labor markets operate (Salem, 2016). First, advances in artificial intelligence in combination with modern robotics are threatening to automatize jobs that were previously considered too complex for non-human execution. Examples range from driverless vehicles to automated customer relations that are displacing specialized labor in transportation, sales, logistics and several other components along the value chain.

Estimates about the number and scope of occupations at risk of automation vary widely. One study has found that 47% of total US employment is in the high risk of automation category (Frey and Osborne, 2013). A more conservative estimate by the OECD considers, on average, only about 9% of jobs in rich countries to be at high risk of displacement (OECD, 2014). Ultimately, these estimates depend on judgments about the pace of automation and the vulnerability of different occupation categories. There is nonetheless agreement that new digital technologies are affecting the composition of labor demand, favoring high-skill occupations that complement technology investments while displacing routine tasks in the middle of the skills spectrum (Jaimovich and Siu, 2012).

Several studies suggest that vulnerability to automation is even higher in developing countries (Frey and Osborne, 2016). However, others argue that several factors, including lower labor costs, reduce incentives to capital investments in automation technology, and are therefore likely to delay the full impact of these transformations for several years (if not decades) in the global South.

The available evidence shows that employment in these regions is already being transformed by labor digitization. In particular, there is evidence that the share of employment in high-skill and low-skill occupations is growing, at the expense of middle-skilled employment (World Bank, 2016). This is creating a polarized job market that is only likely to exacerbate the social and economic inequalities that have historically characterized developing economies.

A related trend reshaping global employment is the emergence of online labor platforms. These platforms optimize matching between labor demand and supply, facilitating the unbundling of work into smaller tasks that employers can contract out to freelance workers around the world. In combination with the exponential growth in connectivity infrastructure worldwide, these platforms have the potential to disrupt traditional labor contracts, favoring piecemeal outsourcing to independent contractors over long-term employment relations.

While reliable data is scarce, it is estimated that approximately 48 million workers were registered in online labor platforms in 2015, although only a fraction were active (Kuek et al., 2015). A recent survey in five EU countries (Huws et al., 2016) found that between 9% (UK and the Netherlands) and 19% (Austria) of adults have carried out paid work through online labor platforms, though the share of regular online earners varies between 6% (UK and Sweden) and 13% (Austria). Similar findings are reported in the US, where 5% of Americans were found to have earned money performing tasks online (Pew Research, 2016). Unsurprisingly, the survey found that participation in online labor platforms is significantly higher among ethnic minorities and low-income households.

From a development perspective, the digitization of work enables job seekers in poor countries to enter labor markets in rich countries, previously inaccessible due to high communication costs and barriers to labor migration. Virtual labor mobility thus has the potential to raise incomes by decoupling workers from the geographical constraints of local labor demand and improving matching with individual skills (Autor, 2001). At the same time, online work may erode labor protection standards and unleash a global race to the bottom in wages and workers' rights (Kingsley et al., 2015; De Stefano, 2016). Further, there is some evidence that online labor platforms exacerbate the market frictions that result in inferior labor outcomes for women, ethnic minorities and other disadvantaged groups (Galperin and Greppi, 2016).

In sum, there is much that remains to be understood about the digitization of work and its long-term implications for development:

- reliable indicators about the incidence of contingent online work and the pace of labor automation are scarce;

- the articulation between new forms of digital work and traditional employment remains unclear;
- more research is needed about the distributional impact of these changes, both across and within countries;
- there is a need to further explore the implications for traditionally disadvantaged groups, including women and the youth in the global South;
- the rebalancing of market power between employers and employees deserves further attention, both in terms of its legal and ethical dimensions;
- more research is needed about the challenge that labor digitization poses to national regimes of minimum wage protection, health care and pension systems, and labor taxation.

More generally, there is an urgent need for research that helps outline appropriate, evidence-based policy responses to these transformations, in a way that both promotes technology adoption and protects workers' rights.

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