

Digitalization and the Future of Work: Perspectives from the Global South

Policy Brief

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The South American Network of Applied Economics (Red Sur) is an academic research network founded in 1998 by a number of South American public and private universities and Think Tanks, with the support of the International Development Research Centre (IDRC). Red Sur's mission is to contribute to regional socio-economic analyses and debates by understanding global dynamics and identifying responses to development challenges. It seeks to generate valuable knowledge and develop policies to address the challenges of inclusive and sustainable growth in South America.

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DIGITALIZATION AND THE QUEST FOR DEVELOPMENT

The heated debates around the recently launched ChatGPT – a generative AI chatbot – and its disruptive impacts on society are just another indication of the deep transformational power of digitalization in our everyday life. The production, trade, and consumption of goods and services and their corresponding practices are undergoing a fundamental transformation due to the convergence of diverse organizational and information and communication technologies (ICTs) with artificial intelligence (AI). This includes the datafication of everything and everyone, and the growing prevalence of data-driven decision-making in business.

Digital technologies are critical to the labor market because they can redefine the entire world of work. Consider how the Neolithic revolution transformed hunter-gatherers into farmers and how the industrial revolution converted the self-employed into factory workers.¹ In some cases, new labor relations brought about workers' movement from low- to high-productivity jobs, contributing to increased economic growth and unprecedented improvements in living standards.

In the past, countries that escaped low-growth and development traps have created new, better paid jobs by leveraging the advantages of emerging technologies. How can we transform this new wave of rapid technological change into an opportunity for development in the Global South? Which are the appropriate policy frameworks – in terms of technological change, skills development, and labor market regulations and institutions – that governments in the Global South should follow?

NOT A SINGLE ANSWER

There is no straightforward answer to these questions; economic and social transformation is deeply rooted in the local context. Even digitalization, which largely involves shifting economic and social activities from the physical world to the digital realm, is subject to the capabilities of local firms, the skills of domestic workers, the available infrastructure, and the state of government finances, among other factors.

The Global South differs markedly from the Global North in this regard. Therefore, it is crucial to first comprehend the unique elements characterizing the challenges for the future of work in the South on various fronts, such as technological sophistication, educational systems, and labor market features. Secondly, the Global South is not a homogeneous entity; rather, it is comprised of a diverse range of countries with varying historical, institutional, and social contexts. Therefore, after addressing the challenges characterizing the Global South as a whole, regional perspectives are discussed.

Failing to adapt the conceptual framework for the future of work to local realities might result in too much concern being placed on issues that are not of high priority and, even worse, missing policy questions that are critical to the development agenda.

THE GLOBAL NORTH/GLOBAL SOUTH DIVIDE

Debates in the Global North on technology and the future of work are built on the premise that AI-centered technological innovation is booming,² and its growth is exponential. The future is already here. But

today's labor and skills development institutions, which were effective in shaping technological innovation toward dynamic and inclusive labor markets³ in the pre-ICTs era, are not appropriate to confront the challenge of AI and other emerging digital technologies.

»Digital technologies are critical to the labor market because they have the ability to redefine the entire world of work.«

Thus, this view of the future of work highlights a mismatch between the speed of technological change and the speed of human adaptability: Technological innovation moves exponentially, while institutions evolve linearly. This mismatch explains the recent widening in income inequality and needs to be fixed by institutional reform.

In a context where the conceptual field is dominated by science fiction,⁴ the Global North's narrative on the future of work represents a good first step for guiding public frameworks, as it breaks away from the (largely unfounded) fears of robots dominating humans. However, this narrative has its own set of assumptions regarding the pattern of technological change, the functioning of institutions and, more generally, everything that matters to the future of work.

How to enrich the debates to reflect the challenges and opportunities of the Global South? A natural next step is to add context and diversity to these debates. Fortunately, a lot of research has been carried out during the last decade to assess what the future of work is likely to be in the Global South (see our own research here).⁵ In a first attempt to systematize this research and data, we have identified four key structural features in which the Global South and the Global North differ, and which need to be emphasized in any meaningful narrative about the future of work in the developing world.

First, in the past, the Global South has failed to make the most of global technological innovations, and remains a follower in the age of AI.⁶ This matters because governments in the Global South cannot take exponential innovation for granted. Of course, developing countries need to understand the consequences of fast automation. However, today, automation is probably not as much of a threat as failing to encourage a more accelerated diffusion of new technologies.

Second, the challenges of skilling and reskilling are more complex in the Global South,⁷ as many current and future workers are excluded from education and training institutions. Furthermore, those who are integrated in these institutions suffer the consequences of low-quality education systems.⁸ From a Global South perspective, curricula reform must be addressed, incorporating new elements of analysis – low coverage, bad quality, and scarce finance.

Third, labor market institutions differ in fundamental ways. While in the developed world, technological change is challenging

formal jobs, in the less developed world we need to add to these threats the likely impacts in the informal sector, as non-standard forms of employment are the norm.⁹

Fourth, inequality in the Global South goes well beyond income. In these countries, the uneven distribution of voice, digital capital, skills, and firms' capabilities translates into a marked inability to take advantage of emerging growth opportunities, such as technological innovations. Getting into the complex issues related to structural inequality is key for countries in the Global South.

REGIONAL PERSPECTIVES

These structural elements are common to developing countries; they comprise a shared agenda for the future of work in the Global South. However, the Global South is composed of very different countries, where labor market features differ in terms of how demographics, inequality, technological change and skills formation, as well as culture and history, interact with each other. Thus, to go a step further from a single Global South framework, in the rest of this article we put additional effort into understanding the most distinct elements characterizing the challenges facing the future of work in three regions of the Global South: South and Southeast Asia, the Middle East and North Africa, and Sub-Saharan Africa.

Balancing Growth in South and Southeast Asia

This region, comprising almost a third of the global labor force, has experienced a long period of high economic growth, sustained in large part by the diffusion of technological innovations.¹⁰ Although

South and South-East Asia are still far from reaching the living standards and welfare levels of advanced economies, this dynamic of accelerated growth has sharply increased inequality within countries.¹¹

One way to think about the region's key challenges going forward is through the Kuznets Curve.¹² The Kuznets Curve shows the relationship between the level of well-being of an economy (approximated by GDP per capita) and its level of inequality. For most of the advanced economies until the mid-twentieth century, this curve has an inverted U-shape, so that once a country reaches a certain level of GDP per capita, it modifies its growth model to make it more inclusive.

»Taking ownership of the Global South's transformational capacity is the first step to building a brighter future of work.«

Many countries in this region are advancing along the first part of the curve, moving workers from rural areas to cities, accelerating growth and inequality at the same time (although poverty rates are at a historical low). Therefore, the great challenge ahead for South and Southeast Asia is not the rate of technological innovation, but the direction of change. It is therefore a question of rethinking policy frameworks

for making growth more inclusive by design¹³ – and the labor market has a key role to play.

»It is crucial to first comprehend the unique elements characterizing the challenges for the future of work in the South.«

How can we achieve better equity outcomes in the region? There are four key elements that should be part of this narrative about “balancing growth”:

- The first has to do with structural transformation, and refers to switching the focus from manufacturing to services¹⁴ as the target sector to lead the way, increase productivity, and create quality jobs.
- The second is associated with the impact of the high diffusion of labor intermediation platforms,¹⁵ particularly in the low-skilled segments of the labor market. Their effect in terms of quantity and quality of jobs are varied, but tend to be more negative the greater the oversupply of labor in these markets is.
- The third point refers to the readaptation of workers’ skills¹⁶ in the labor market. There is a need to innovate in technical and vocational education and training (TVET) in order to adapt to informal settings.

- Finally, the issue of inequality in the digital world, which particularly penalizes women,¹⁷ is largely unaddressed in policy frameworks.

Finding Schumpeter in the Middle East and North Africa (MENA)

Successful structural transformation implies that a set of innovations emerges and makes obsolete the technologies and ways of producing of the past, thus automating specific tasks and creating new jobs in the most dynamic activities. This process of structural change was described by Joseph Schumpeter as one of creative destruction and is one of the leading forces behind technological innovation and its positive impact on productivity, job creation, and real wages.

The MENA story of digitalization and jobs stands out for the relative absence of creative destruction dynamics.¹⁸ The region continues to rely heavily on commodity exports for growth and employment generation, and very little has been achieved in terms of productive diversification.

The primary indicator of innovation anemia is related to the dynamics of GDP per worker. According to productivity data¹⁹ compiled by the World Bank, growth in GDP per worker was almost exclusively due to new capital investments in natural resource-intensive sectors. At the same time, total factor productivity, the main proxy for technological innovation, contributed negatively to the growth of GDP per worker. In other words, the allocation of new investments has been detrimental to innovation and creativity. This should raise a red flag in terms of the sources of growth and job creation in the region.

Thus, the main challenge for MENA’s future of work will be to fundamentally change its growth model.²⁰ In the past, high levels of natural wealth allowed for a substantial expansion of the public sector, dictating investment and innovation decisions, in addition to being one of the leading employers in the economy.²¹ Moreover, the combination of a large state with high natural wealth led to a counterpart in the educational system. In this scheme, incentives have been placed on obtaining the necessary credentials²² to enter the public sector, rather than acquiring the skills to become employed in the more productive, future-oriented industries. This explains the low-productivity dynamics observed in the region.

A future of work narrative for MENA must encourage innovation and private sector risk-taking. Timing matters, as the next fifteen years will bring a rebound in the relative size of the young population. In a nutshell, the region needs to reconnect to the innovation dynamics of growth, that is, to “find Schumpeter.” The issues that need to be emphasized in this narrative relate to:

- A very small and protected private sector and an overly large public sector
- A high dependence on natural resources
- An education system based more on credentialism than on twenty-first century skills
- A damaged relationship between the state and the citizenry
- Private sector behavior and public policies

The Future of Work is the Future of Sub-Saharan Africa

The story of digitalization and jobs in Sub-Saharan Africa differs substantially

from those mentioned above. While societies in the rest of the world are aging rapidly, Sub-Saharan Africa is young, about to enter the demographic dividend stage, and the demographic transition is unusually smooth.²³ In other words, the challenges of job creation at the global level in the coming decades will be concentrated in Sub-Saharan Africa. The labor market of the future will be shaped by the stock of skills, the technologies and the regulations of African labor markets.

The need to create more than 500 million jobs in the next three or four decades meets a complex outlook in terms of adaptability to change. In the technology realm there has been a lot of progress in recent years, but in relatively simple, end-user applications. Still, much remains to be done towards the creation, dissemination and adaptation of complex AI solutions on a large scale.²⁴ On the skills side, there is underinvestment in critical skills, there is mis-investment in routine skills rather than creative ones, and there are severe problems of inequity, which go beyond income or gender. Finally, the productive bias towards agricultural activities

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implies a low employment elasticity for economic growth.

Therefore, the biggest challenge for Sub-Saharan Africa regarding the future of work is to match structural transformation with the demographic dynamics²⁵ of a long-lasting expansion in the labor force.

With the labor force being set to double in next three decades, the pressure to create jobs will be very strong and policy frameworks must be revised to accelerate change:

- In terms of technology, the goal must be to go beyond leapfrogging in simple technologies.
- In terms of skills, investing decisively in the current education system is key.
- In regulatory issues, policies must increase efforts to encourage productivity gains in the informal sector.
- Finally, a major underlying challenge for embracing the needed transformations is the limited capacity of governments in terms of resources, capabilities, and incentives.

CONCLUSION

There is a fundamental mistake in trying to predict the future: it doesn't exist yet. Taking ownership of the Global South's transformational capacity is the first step toward building a brighter future of work.

In this document, we sought to provide a first set of elements that serves to adapt the standard narratives on the future of work to the context of different Global South regions. We hope it helps developing countries toward framing policies that reflect their background and challenges.

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