



Concept Note

Curse or Cure? Leaving No One Behind in an Age of Technological Revolution

A UNDP side event at the UN General Assembly

Background

Fulfilling the pledge to leave no one behind of the 2030 Agenda needs to take into account a world that is undergoing profound transformations. One of these being the fourth industrial revolution¹ characterized by an unprecedented speed of technological change.

Digital technologies play an ever-increasing role in almost all sectors of society and across industries through increased use of better and faster internet, remote sensing devices, satellite imagery, higher computing power, and through advances in machine learning and artificial intelligence. They offer new means of tackling issues such as financial inclusion, climate change and rapid urbanization. But AI and automation can also lead to rising inequalities both within and between countries. It is up to policymakers to leverage these technological developments for good, and to mitigate their risks.

This side event will take stock of the challenges and opportunities posed by the ‘forth industrial revolution for the future of work. It will consider policy innovations occurring around the world, and how they aim to ensure that the unfolding technological transformations are leveraged in ways that leave no one behind.

Issues and Significance

The technologies of the third industrial revolution (the digitalisation of information and the use of computers and the Internet) are already creating unprecedented opportunities. For instance, greater financial inclusion is now within reach through the use of cell phones and mobile banking and insurance.

But these technologies are changing our economies and societies in very fundamental ways, in some cases eroding demand for routine-based occupations. Middle-skilled

¹ The 1st industrial revolution refers to the use of water and steam power to mechanize production, the 2nd to electric power and large industry, and the 3rd to automation of production through electronics and information technology. The term 4th builds on the 3rd and covers what is believed to be an unprecedented speed (the term exponential is often used) of technological change in multiple different and interlinked technologies, blurring the lines between physical, digital and biological spheres and affecting almost all industries and countries. More specifically, the set of technologies often mentioned are; artificial intelligence, robotics, the internet of things, autonomous vehicles, 3D printing, nanotechnology, biotechnology, materials science and quantum computing.

workers have suffered a particularly negative impact in developed countries, losing jobs to automation and off-shoring, accounting for high or rising income inequality. For developing countries it has been suggested that they are running out of industrialization opportunities earlier and at lower levels of income. For countries that have managed to gain a foothold in global value chains there is fear of set-backs from potentially large scale reshoring in the future.

There is some concern that disruptions will only increase as the technologies of the ‘fourth industrial revolution’ - artificial intelligence and automation – take hold. Some estimates peg the share of jobs at risk of automation to numbers as high as two-thirds of all jobs in developing countries.

Yet, even if future development pathways cannot just replicate those of the past, harnessing science, technology, and innovation for prosperity, sustainability, and inclusion is a matter of policy choice – not an inevitability that will befall countries and societies.

At macro level it is key to try to understand the driving forces (policies and regulation) of the changes we are witnessing, their impacts and how policymakers can take action to harness benefits and mitigate risks. At the micro level we are already seeing many great and promising use-cases, to mention a few: In health care AI can help make better diagnostics and drones can deliver medical supplies; satellite imagery can help combat deforestation and combined with machine learning and AI help predict poverty; digital technology can boost agricultural productivity; and digital technologies are contributing to financial inclusion, with positive impacts across multiple SDGs.

Outcome and format

The envisaged outcome is a call to action to ensure that the next wave of industrial revolution is harnessed for the benefit of everyone, everywhere.

The event will be organised as a conversation between leaders of the UN system, vanguards of the digital economy (governments, business), as well as experts on inclusion and the dynamics of inequality in the age of technological transformation (academia, civil society).

Date, Time and Venue:

September 25, 2018, 11.30-1.00 PM, UN Trusteeship Council

Program

Conversation between Heads of State/Government (from the Global South & North), business leaders, academia and civil society (up to 1hr)

Q&A with audience (up to 20 minutes)

The event will be moderated by the UNDP Administrator