

## Is Africa on the losing end of the fourth industrial revolution?

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Driverless cars, artificial intelligence-the fourth industrial revolution is here and truly upon us. The average person can hardly log on to any media portal without encountering the heralding of this new and exciting era. The question, however, is whether Africa will ultimately benefit from the wave of developments ?

The world has made major strides in terms of how efficiently things are done in our day to day lives with notable turning points being the Industrial Revolutions. The first industrial revolution which commenced in the latter half of the 1700s brought about the advent of factories- a change from the traditional cottage industries, the second revolution adding mass production and electricity to the factories. The third industrial revolution saw the introduction of digitization as we know it today and it continues to make the great strides into the new era where digital, physical and biological innovations converge to be termed the fourth industrial revolution.

The breakthroughs that are being made are endless. There is now genome editing which can modify disease-causing genes in embryos. This removes the faulty genetic code of that person's future descendants. There is big data, where data is used to predict natural disasters thus saving countless lives and billions in potential asset losses. The other side to the fourth industrialisation is the increased offerings of automation paired with artificial intelligence to produce groundbreaking services such as driverless cars. Whilst the idea of the driverless car has not yet caught on in continental Africa, the uptake of drone technology has been quite impressive with countries such as Botswana, Kenya and Zimbabwe having had to introduce regulations to keep up with the reach of unmanned aerial vehicles.

The Rwandan health sector is one that can be counted as a net benefactor of this latest round of technologies. The use of drones has slashed the delivery time of life-saving medicine to remote regions of Rwanda from four hours to an [average of half an hour](#). The [use of drones](#) is helping to reduce maternal deaths. A quarter of which are the result of blood loss during childbirth and high incidences of malaria-induced anaemia{which is common in children}.

Agricultural practices on the continent also stand to improve as artificial intelligence is being used to track weather patterns, collect farmers' third-party supplier data as well as satellite and broader value chain information. This will bring efficiency to an industry where it is estimated that 30%-50% of food is lost in the supply chain according to the United Nations Food and Agricultural Organisation.

Although some sectors have ultimately benefited from automation and artificial intelligence, there has been an onslaught of job losses in industries that require manual and repetitive labour, for instance, jobs in call-centers, retail, and administration. The bulk of Sub-Saharan Africa's labour force is composed of medium to low skilled workers and this is a less than ideal situation in a world that is heading towards automation. In South Africa, entertainment giant Multichoice recently disengaged over 2000 employees

for retrenchment as most customers now are said to prefer using digital platforms. The Zimbabwean banking system, besides the economic factor, has also been shedding jobs due to low branch traffic as customers are more inclined to online transacting. These job losses are especially catastrophic given the already high unemployment rate in Africa. They are bound to increase as more industries buy the idea of automation.

The question will then be how Africa will adapt to the changing environment to avert the looming crisis of another round of mass unemployment. The world is progressing and will continue to do so whether we appreciate it or not. African nations should, therefore, embrace the latest technological developments as a step to achieving better standard of living. It goes without saying that the most important step would be to upskill the labour force so as to survive in a world dominated by machines. This should not become a battle of man versus machine but rather a synergy where Africa is welcome in the new dawn.

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