

# African countries can't industrialise? Yes, they can

November 4 2019, by Wim Naudé

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Narratives are essential. Humans are, after all, "helpless story [junkies](#)". Business and economic success depend much more than is commonly acknowledged on getting the narrative right. And if there is a narrative where getting it right or wrong matters hugely, it is the narrative about Africa's industrial development.

Africa is the [poorest](#) continent. It is likely to be the most affected by [climate](#) change. It is the continent where [terrorist](#) groups are spreading fast.

Therefore, African industrialisation is essential. Unfortunately, the dominant narrative is that Africa has been [de-industrialising](#), even [prematurely](#). In this narrative, it is also questioned whether Africa can ever industrialise. African countries have even been advised not to [try](#). The World Bank's "[Trouble in the Making](#)" report concludes that [manufacturing](#) is becoming less relevant for [low-income countries](#).

Fortunately, a very different narrative is possible. In a [recent paper](#), I argue that Africa can industrialise because of three factors. These are "[brilliant](#)" new technologies enabling digitisation, smart materials and 3-D-printing; a more [vibrant](#) entrepreneurship scene; and Africa's growing [middle class](#) (as [measured](#) by the share of households that earn between \$11 and \$110 per person per day), which supports the continent's first generation of indigenous tech-entrepreneurs.

Consider therefore the following [narrative](#): More than [300 digital](#)

[platforms](#), mostly indigenous, are operating across the continent. There are also more than [400](#) high-tech hubs, and more are being added. In addition, venture capital funding into African tech start-ups increased [ten-fold](#) between 2012 and 2018.

Moreover, manufacturing has more than doubled in size in real terms since 1980. And since 2000, manufacturing value added has grown at more than 4% a year. That is double the average between 1980 and 2000 (numbers from the [Expanded](#) African Sector Database).

As a result, total employment in manufacturing in 18 of the largest African economies (for which there is data) grew from roughly 9 million in 2004 to more than 17 million by 2014. That is an 83% increase in ten years. The proportion of labour in manufacturing for Africa as a region grew from roughly 5% in the 1970s to almost 10% by 2008.

So, how will these trends shape the future? I argue that they will result in three varieties of industrialisation.

## **Three varieties**

The first variety can be labelled "acquiring traditional manufacturing capabilities". This variety is [implied](#) by Overseas Development Institute researchers Karishma Banga and Dirk Willem te Velde. It will be experienced by countries and sectors where technological change is too fast and complex to benefit immediately. These countries and sectors will need time to first put complementary investments in place, while at the same time continuing to promote traditional labour-intensive manufacturing.

The second variety, "fostering sectors with the characteristics of manufacturing", is elaborated in a recent [UNU-WIDER](#) book. Here it is argued that service sectors can take up "the role held by manufacturing

in the past". In many countries, services such as ICT and telecoms, tourism and transport, financial and farming services can lead to productive development.

The third variety, "resurgent entrepreneurship-led industrialisation" is based on my [earlier](#) work. I point to the growing list of achievements of African countries in terms of high-tech manufacturing. For example South Africa leads in advanced manufacturing in having one of the world's [largest](#) 3-D-printers, used to manufacture parts for the aviation industry.

Different combinations of these varieties will dominate in different countries. For example, Kenya is already experiencing the simultaneous development of high-tech financial services alongside growth in traditional manufacturing, such as food processing and textiles, as well as clusters of advanced manufacturing. While every country's pathway will be a unique combination of these varieties, what they will have in common is that progress will require that they deal with the impact of new technology, especially digitisation, on manufacturing.

To ensure momentum is maintained, the narrative about industrialisation has to change. As Israeli historian Yuval Noah Harari [pointed](#) out, neither land—the core resource of feudalism—nor physical capital—the core resource of 20th-century capitalism—will be decisive for competitiveness in the future. Instead, data and [data science](#), free information flows, ICT (data) skills, and decentralisation of decision-making will be the decisive factors.

## **What needs to be done**

With an outdated story that gives up on manufacturing, Africa will fail to close the huge digital gap it still faces. The gap is reflected in the fact the continent contributes [less](#) than 1% of world's digital knowledge

production. To reduce this gap, African countries will have to start by expanding internet access and use. If internet use across the continent can be expanded to the same rate as in high-income countries, 140 million new jobs and US\$2,2 trillion could be [added](#) to GDP.

What must be done to change the narrative? What do African governments need to do? The first is that its leaders need to start telling more stories about the future than about the past. Perhaps, like China's leaders, they can even be inspired by [science fiction](#). British best-selling author [Neil Gaiman](#) relates how China started to embrace science fiction after sending a delegation to "the US, to Apple, to Microsoft, to Google, and they asked the people there who were inventing the future about themselves. And they found that all of them had read science fiction when they were boys or girls."

Helping to imagine the future of African industrialisation, South African President Cyril Ramaphosa recently [stressed](#) that fact that Africa is one of the early adopters of mobile telephony and moreover that the continent needs to aspire to more: "We need to focus on the new technologies that are going to revolutionise the world, and we need to be ahead of the curve."

This is the right narrative. It is necessary, although not sufficient for African industrialisation. For this, words need to lead to actions. And some consistent actions, at least for a start, would be for African governments to refrain from creating stumbling blocks for their brave new tech-entrepreneurs, such as curbing access to the internet, restricting digital information flows, under-investing in science, technology, engineering and mathematics education, neglecting data-privacy legislation, and restricting the rights of women to work in manufacturing.

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