Can Digital 4IR technologies drive development?

The World Economic Forum recently posed the question… *“companies benefit from the Fourth Industrial Revolution, but do countries?”*

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As members of the Namibian Presidency's Fourth Industrial Revolution (4IR) advisory group, we pondered this as we deliberated as to how to design a country-led strategy to better enable 4IR technologies in the economy. It is imperative that such technologies enable business and contribute to the generation of GDP, job creation and competitiveness.

The Task Force was mandated to conduct a country readiness assessment to determine the state of Namibia's digital maturity and make recommendations toward enhanced policymaking and creating a legislative framework supporting 4IR technologies. As technology increasingly outpaces regulation, it is imperative that governments become more agile and more digital in approach. Strategic recommendations toward this objective have been designed to support the Government of Namibia to better support and pivot toward technology-driven industries.

Namibia's national development strategy strives to overcome its geography as a small, commodity-driven economy on the periphery of the global economy. According to the World Economic Forum's (WEF) Global Competitiveness Report (2019), Namibia ranks 122nd in the world in terms of market size. Harm de Blij argued in his book, *The Power of Place,* that economies have unequal distribution of natural resources and more importantly unequal availability of opportunity. Can Namibia embrace 4IR technologies and deepen its human capital base to overcome its comparative geographic disadvantage?

The past

The greatest economic hope for the developing world is that these countries will ultimately catch up with rich countries. At least from the end of the colonial period, this has been the general expectation or - for the southern African region - since the early 1990s. The theory stands that differentials in GDP growth between poorer countries and rich ones would ultimately result in a convergence of living standards in the developing world to that approaching the rich world. Economists projected that emerging economies with younger demographics, pragmatic allocation of capital, expansion of enabling infrastructure, and structural reform would fuel rapid growth and deepen development.

For the most part of the second half of the 20th century this hypothesis turned out to be true for only a handful of standout emerging countries. Convergence was mostly an Asia story and - in the post-Cold War era - an emerging Europe one. Aspirant countries in Africa were left behind.

The present

But for large parts of the developing world (the Global South) as we emerge from the crisis brought about by COVID, divergence from the developed world is the trend of the times. Whilst for the most part of this century commodity prices have been robust, this has not translated into positive developmental prospects for most extractive industry dependent countries.

Quantitative headline growth does not automatically equate to deeper qualitative growth in countries. Many of these countries have not carried out the necessary structural reforms in line with the rapid change in the global economy. Without structural reform, they will underperform going forward, thus contributing to the divergence trend between First and developing worlds.

The trend for these economies is not globalization through integrating into global value chains but rather marginalization from flows of trade, finance and human capital. The pandemic has hit much of the developing world hard with China being one of the few sizeable economies that expanded in recent times (and smaller Asian economies in its orbit). Most other emerging economies have contracted these past two years. The United Nations reports that its measured global "extreme poverty rate" has now risen for the first time in over 20 years. The global economic recovery is now underway, but developing nations face a long journey back to normality.

The future

The COVID period has acted as an accelerant for the adoption of digital technologies as companies seek to boost competitiveness by reducing established costs and driving efficiency in their business.

Many African economies are ill prepared for rapid change driven by technology and behaviour. This shift could delay an economic recovery in many developing African states.

The crisis will leave lasting scars in a new but higher risk world order. The crisis has undoubtedly revealed the fragility of the growth models of many developing countries and threatens to deepen the divide between advanced economies and the Global South. Rwanda's President Paul Kagame warned (in the Financial Times) that it could take "a generation or more" for many African countries to recover from the pandemic.

Digital as the differentiator

It is high time that African countries differentiate themselves in what has become an incredibly competitive global economy where capital seeks new differentiators of value creation. Investing in emerging markets is a constant interchange between growth and risk. Without growth, there is only risk – something that South Africa is now experiencing. To create sustainable growth beyond temporary growth spurts provided by commodity price cycles, it is imperative that countries combine structural reform with digitisation strategies to drive efficiency and boost competitiveness.

Arguably, the public sector has been the least impacted by digital disruption. Namibia currently ranks 80th – again according to the WEF - in its capability to innovate as a country – Germany is the global leader. In our initial research however, we do see signs of rising innovation from smaller companies in Namibia which is a positive trend to scale.

Underpinning innovation is research & development spend, enabling digital infrastructure and deep pools of skilled human capital. Innovation will, I believe, be the defining factor of successful countries going forward – moving beyond static extractive business models toward rapidly changing industries that are redefining existing jobs and creating new ones.

Human capital as the critical resource

Technological adoption has seen the emergence of entirely new jobs that were inconceivable even a decade ago – data scientist, social media manager, cloud architect and telemedicine physician are all entirely new jobs for instance. In a more digitized economy, human capital - or talent - will increasingly be the only critical resource. Namibia and other developing countries in the region will continue to endure high levels of structural unemployment as long as there is a disconnect between the skillset of the current labour force and the skills which the new emerging economy actually needs.

Skills development must not be confined to local populations. Access to and attraction of global talent focusing on value-job creation is no longer a competition between companies but rather countries. Many countries are succumbing to short-term and populist-driven protectionism of their labour markets by closing their borders to flows of labour from other countries. This is the wrong approach. To counter the economic scars of the Covid period, nations need to be open to pro-actively courting talent in line with the needs of their own national economic development strategies. Successful countries have open economies; those that close their borders to talent will structurally decline.

To respond to a very rapidly changing global marketplace that is shaped increasingly by digital technology and influenced by talent, Namibia requires a public policy agenda that is strategic, agile and creative in order to move beyond the existing economic structures. To be effective, public policy must better enable business and economic development for a more affluent country and continent.

Three decades ago, strategy guru Michael Porter said *"Ultimately, nations succeed in particular industries because their home environment is the most forward-looking, dynamic, and challenging."*

About the Author

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