

Investing in digital infrastructure can make the difference to Africa's economic recovery

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Africa faces many challenges on its path to becoming a global economic competitor. The impact of the Covid-19 pandemic on Africa's development can either be a massive barrier to advancement - or, the spark that lights the fire of innovation and investment across the continent.



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There's no denying that for most of the world, the Covid-19 pandemic has pushed digital adoption forward in vast leaps in a very short space of time. What the pandemic has also made apparent is the disparities of infrastructure across Africa, as well as gaps in adoption and policy.

It's now a necessity, rather than a luxury to fast-track the adoption of technology. By increasing productivity and facilitating innovation, technology is a key sector for the economic development of any country, and those who have embarked on their digital transformation journeys are better equipped to handle the obstacles that arise.

A recent report by McKinsey & Company on Africa in the wake of Covid-19, suggests that to expedite Africa's economic recovery beyond the pandemic, the continent will need to accelerate its digital transformation. The report urges governments and social sector institutions to expand and broaden digital offerings, foster an enabling environment for rapid digitisation and speed up infrastructure investments, among other things.

Access is of paramount importance

Lack of broadband is a central issue – many countries are below the 20% critical mass necessary to achieve improved efficiencies and enhanced information flows for economic growth and innovation. Consumer demand for wireless connectivity is surging and spectrum is a finite source. It is critical to intensively share underused spectrum bands.

As the Covid-19 pandemic has introduced social distancing and lockdown orders across the continent, the need for digital connectivity is more essential than ever. And as the pandemic spreads beyond major cities into peri-urban and rural areas, unconnected or under-connected populations risk becoming more vulnerable and isolated as they lack the digital means to access essential services. Wi-fi hotspots can provide effective connectivity solutions to Covid-19 testing stations and field hospitals, and can support remote working and learning.

Microsoft has been championing the use of TV White Spaces (TVWS), which uses unused portions of spectrum for television broadcasting to bring broadband and internet-connected solutions to remote and underserved communities at an affordable cost, since the launch of 4Afrika partner Mawingu's pilot project in 2013.

The sustainable nature of this type of spectrum use makes it very cost efficient to implement, which is extremely beneficial for rural, underserved and developing areas. With TVWS, people are now able to access the internet for less than 5 percent of the average household income.

In Kenya, Project Mawingu connects schools, the Laikipia County Government Office, Laikipia Public Library, Red Cross and the Burguret Dispensary Healthcare Clinic. With support from Airband's Covid-19 response fund and from the Department for International Development, Mawingu is connecting 85 unserved public health clinics across Laikipia county. They plan to have the first 24 clinics connected in the near future.

Now a part of the Microsoft Airband initiative, Microsoft also has plans to expand and commercialise each of its TV white spaces (TVWS) pilot-projects, ensuring more people can affordably access the internet across Africa.

In Eastern Ghana, another Airband Initiative partner Bluetown is delivering affordable broadband, with 440,000 people under coverage in rural areas. Using technology like TVWS, Bluetown is enabling local businesses and schools to access digital services, and including the Western project, the projected coverage number is just under 2 million people.

The effectiveness of TVWS technology has been proven and commercial deployment is underway following the completion of its regulatory framework in many countries around the world. As a member of the Dynamic Spectrum Alliance (DSA), 4Afrika also recently participated in public consultations in Nigeria to motivate for the rollout of TVWS technology across the country.

Through this and other partnerships, we've demonstrated how new technologies, business models and regulatory approaches expand internet access and support public policy goals around education, healthcare, e-government and other priorities. This in turn motivates governments to adopt more regulations opening up access to TV white spaces frequencies.

Skills development is a crucial part of digital infrastructure

As much as we talk about the need for intensive ICT investment into infrastructure and the technology that will support Africa's engagement in the Fourth Industrial Revolution (4IR), this will not happen without the human infrastructure to support the technology. For Africa to fully realise the opportunities brought about by digital transformation and 4IR, it is vital we have strong ICT skills. We refer to this as having 'tech intensity' – the ability to not just adopt emerging technology, but develop the capabilities to effectively use it. Skills development has a crucial role to play, both in skilling new resources – our youth – and also in upskilling our current workforce to play their part in supporting ICT infrastructure development.

With the youngest population in the world, Africa can supply the world's future workforce. But over 50 percent of young people in Sub-Saharan Africa lack access to formal education, and only two percent of the labour force has IT skills. Microsoft is continuing our skills development initiatives, including a partnership with the African Development Bank to upskill 50 million youth and create 25 million jobs by 2025.

4Afrika's partner-led SkillsLabs and the Interns4Afrika programme offer our graduate youth access to skills and certification, so that they are workplace-ready by the end of their programmes, and our Enterprise Skilling initiative works with employers to provide upskilling and reskilling opportunities to existing workers who want to improve their skills and move into 4IR positions.

Developing skills to fill these new job roles remains high on our agenda. Regardless of age – whether students in schools, youth in and out of college, or today's IT professionals – our mission is to empower every individual to achieve more by skilling, upskilling and reskilling them to lead a better quality of life. Through initiatives including Cloud Society, the AI Business School, and partnerships with NGOs, governments, academia and businesses, we are helping to build digital talent pipelines for our partners and customers.

Ingenuity and resolve can help solve African problems

There is an abundance of talent and ingenuity displayed by startups and entrepreneurs across the continent. Investing in them is as important as any other ICT investment. Beyond the future workforce, digital talent will also support more local innovation, as developers and entrepreneurs are empowered to create locally relevant solutions that best address challenges and needs in healthcare, agriculture, financial services, government services and education. As just one example, our partnerships with organisations like FirstBank in Nigeria, MTN and Liquid Telecom are helping to extend cloud services to SMEs, supporting their growth and enabling the economies that they operate in.

Public-private partnerships are necessary

There's no disputing that it will take a concerted effort across industries and sectors to drive digital investment in Africa. In research recently conducted by Microsoft and EY, businesses cite a lack of regulatory guidelines among their top three challenges to implementing AI. African governments have important roles to play in developing sound digital policies and stable harmonised regulatory environments that enable people and businesses to participate fully in the global digital economy.

We are committed to supporting digital policy development and implementation across Africa, working with governments in creating sound digital policies that enable people and businesses to participate fully in the global digital economy.

Now more than ever, we need to pay close attention to how organisations transform digitally, what changes they face in acquiring new technologies and broadband, and the daily challenges they may be facing in the area of digital skills development.

If African governments, together with private partners and organisations, can invest in these areas through supporting startup innovation, through contributing to skills development and in many other verticals, this will drive meaningful gains towards unlocking Africa's vibrant potential.

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